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## The Architecture of the Springfield Municipal Group as a Business Asset

Illustrations from Drawings Made by Louis Orr for his Etching of the Municipal Group

THE interesting commission given Mr. Louis Orr, of Paris, the American painter-etcher, by the Springfield, Mass., Chamber of Commerce, to make an etching of Springfield's well-known municipal group, has served to attract added attention to this notable example of American archi-

tecture. That such a daring design for a municipal building should have been accepted in staid old New England has inspired frequent comment, and it is interesting to know how such a plan came to be accepted. The new group of city buildings was made possible by the burning of the old city hall in 1906. The destruction of the building was total, and made necessary a complete new structure. Some dozen years before the burning of the old city hall, the late Tilly Haynes, a former

The first step of the commission was to ask for a liberal appropriation from the city with which to secure competitive plans. By this method many of the leading architectural firms in the country were induced to make drawings. Some fifty plans were submitted, and by a process of elimination these were brought down to a limited number, and finally the design of Pell & Corbett, of New York, was chosen—a plan calling for two similar buildings with classic Corinthian columns, separated by a campanile 300 feet high. The beauty of the group idea with its tall, graceful Italian shaft, separating the pure Corinthian fronts of the sister buildings, was instantly appealing, but it did not escape sharp and even bitter criticism from the essentially practical taxpayers. But the critics of the plan have long since been silenced, and the loudest champions of the group to-day are to be found among the city's heaviest taxpayers. There is one beauty of the triple structure that does not appear on the surface. It was honestly built. With its administration building, having adequate and very handsomely finished aldermanic and council chambers, spacious offices for all the city officials, a stately marble entrance and stairway, and its beautiful auditorium, seating 400 more people than the Metropolitan Opera House and acoustically perfect, and its stately campanile towering 300 feet high—these buildings, land and all, were completed in 1913 at a cost of \$1,800,000.

The auditorium, with its splendid seating capacity of nearly 4,000 people, and its spacious exhibition hall in the basement, proved ideal for convention purposes, and with this excellent equipment the Chamber of Commerce immediately made plans to attract to Springfield all conventions which it deemed desirable and which it could properly handle. For the past six years the Convention Bureau of the Chamber of Commerce has been spending \$10,000 a year for this purpose, and with excellent results.

It was the desire of this convention committee for some adequate picture of the municipal group to show to conventions it was seeking, that ultimately led to the commissioning of Mr. Louis Orr to make an etching of the group. It was first planned to commission some artist to make an oil-painting, but the committee intrusted with the task was soon convinced that the result of such an attempt would be disappointing. The attention of the committee was then attracted to the work of Mr. Orr and the remarkable honors which had been bestowed upon him by the French Government. Further investigation satisfied the committee that

(Continued on page 351.)

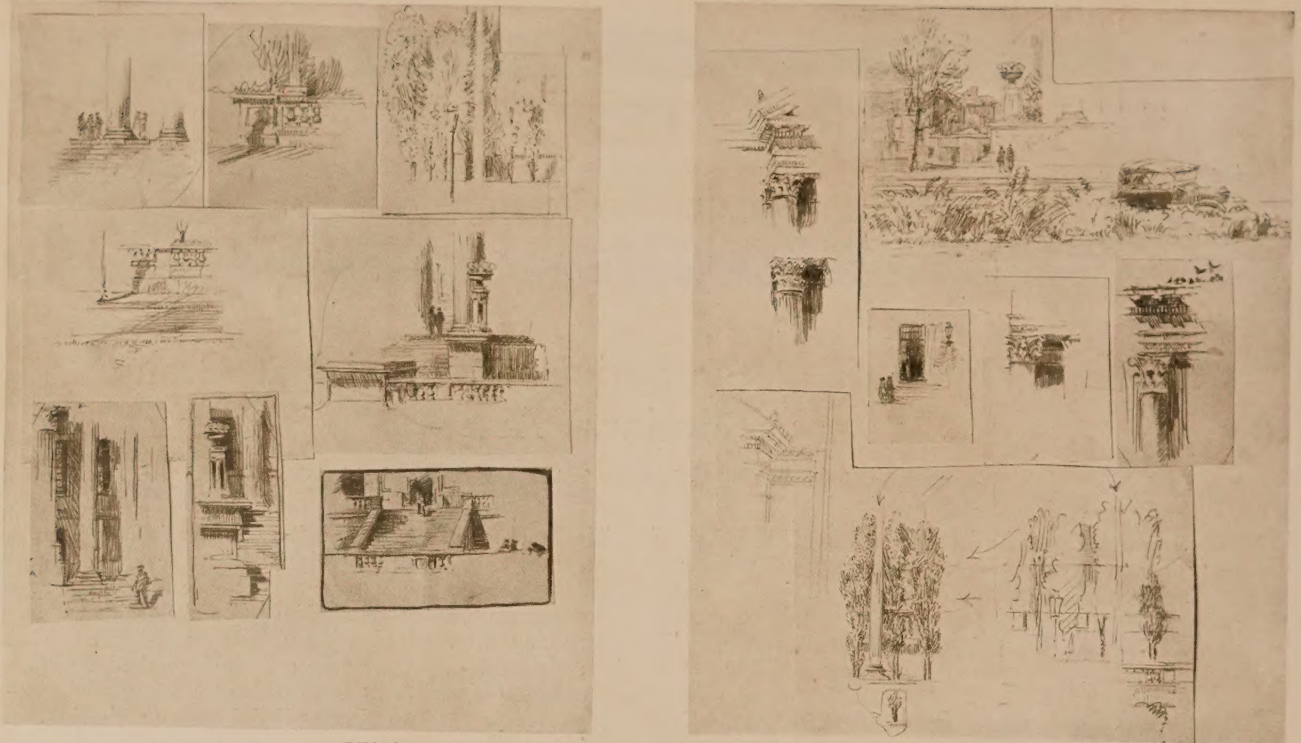


Detail of portion of pediment.

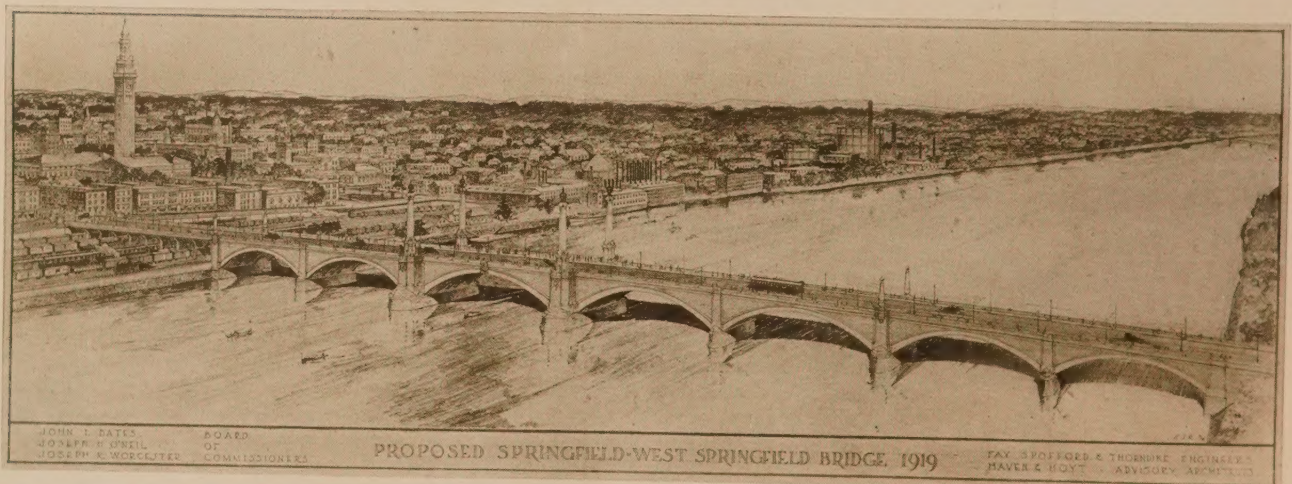
Springfield citizen and later a well-known figure in Boston and New York, had bequeathed the city \$10,000 for the extension of its historic Court Square to the river. Through the energetic leadership of Mr. George Dwight Pratt, who was later to be largely instrumental in securing for Springfield its now monumental group, this amount was increased by popular subscription to \$100,000, with which was purchased the land needed to carry out Mr. Haynes's wish. The entire square was cleared to the river, with the exception of the historic First Church. The opening of this space in the heart of the city made Springfield one of the first cities in America to enjoy a civic centre, and it afforded an ideal location for the classic group that was built.

Soon after the burning of the city hall, Francke W. Dickinson, then mayor, appointed a commission of twenty men, with George Dwight Pratt as chairman, to present to the city plans for a building to replace the old city hall.





PENCIL STUDIES FOR DETAILS OF LARGE DRAWINGS.



The Springfield-West Springfield Bridge, with its approaches, will lead from the heart of Springfield, a little north of the Municipal Group, cross the river, traverse a tract which is ready for development at the southerly end of West Springfield, and furnish ample connections to the centre of West Springfield at the north, and the through routes leading to the whole of western Massachusetts. It will provide for direct trolley service across the river, and for direct access to the fair grounds in West Springfield. It will cross by a concrete viaduct over the railroad yard on the Springfield bank, then by a series of seven arched spans across the river, and then by filled approaches to the existing streets in West Springfield. From end to end of approaches the extent will be about a mile, the river bridge itself occupying some 1,200 feet. The seven river spans will be of reinforced concrete, supported by reinforced-concrete arched ribs. The pier foundations will be of concrete resting on piles. The lower portions of the piers, exposed to the action of the river with its strong current, ice, and other drift, will consist of granite set in a concrete backing. The upper members of the piers will be of concrete. In the finish of the faces of piers and spans some artificial stone will be used. There will be an artificial stone balustrade resting on pilasters, extending the entire length of the bridge on each side.

Under authority of an act of the Massachusetts Legislature, the bridge was planned by a special commission, consisting of Honorable John L. Bates, Honorable Joseph H. O'Neil, and J. R. Worcester, Esquire, and is being built by Hampden County under the direction of the county commissioners. Fay, Spofford & Thorndike of Boston have been retained as engineers by both commissions. Haven & Hoyt, architects, also of Boston, were retained by the engineers as architectural advisers on matters relating to the appearance of the structure, notably to the towers, railings, and the treatment of the ends of the piers. The contract for construction of the bridge, exclusive of approaches, has been let to H. P. Converse & Company, of Boston.





Municipal Group from the river.

(Continued from page 349.)

here was the solution of the problem, for a way was at once apparent for acquiring a desired picture of the group for exhibition purposes and of financing the project. A contract was made with Mr. Orr whereby he agreed to make an etched plate of the group, from which 50 first-state artist's signed proofs are to be pulled, and the plate then destroyed. Five of the proofs are to be retained by the Chamber of Commerce, and 40 of the remaining 45 have already been sold by subscription at \$200 each.

In commissioning Mr. Orr to come to America to make this plate, the business men of Springfield had illustrious precedent, for in much the same way was Canaletto, the Venetian painter, bidden to go to London, 200 years before, to execute a very similar commission. And many other eminent artists have been similarly commissioned to do important things in other countries. Thus it is not unlikely that the Springfield men who have given Mr. Orr this commission will prove the pioneers in a new art movement in America of interesting possibilities.

In giving Mr. Orr this commission, the committee were not unmindful of the publicity that would result from bringing this distinguished American artist from Paris to Springfield. They had reason to believe that it would possess a picture of the municipal group which would be comparable

with Mr. Orr's work in the Louvre and the Luxembourg, which would serve to spread the name and fame of the city, and their expectations have already been realized. It has been an added satisfaction to the committee that Springfield was able to give this commission to a native of the Connecticut Valley—the talented son of its neighboring city, Hartford, Conn.

Mr. Orr is enthusiastic about the beauties of the group and says there is nothing finer in all Europe. Its fame should not be localized, in the opinion of the artist, but should rather belong to the whole country, for it is among the few distinctive American creations in architecture that compare favorably with some of the best things of the Old World. Mr. Orr is loud in his praise of the courage of the men who were responsible for the adoption of so daring a design in a Puritan New England city, and, perhaps from a somewhat prejudiced point of view, he likewise commends the faith of the Springfield business men who gave him this interesting commission. Mr. Orr believes that his coming to America to fulfil this contract will result in similar commissions being given to other European artists, and that the Springfield Chamber of Commerce will be given credit for having instituted in America a practice ages old in Europe, and which has invariably resulted in notably successful achievements in art.





Detail of columns.

Louis Orr, the painter-etcher, was born in Hartford, Conn., and received his first instruction in art in his native city. In 1906-1907 he studied in Paris with Jean Paul Laurens, the widely known painter-teacher. The first award received in Paris by him was a first prize for figure drawing in a competition held by the Académie Julien, which now hangs on the walls of that famous atelier.

He enjoys the unique distinction of having his work in the Louvre. In the permanent collection of the Luxembourg Galleries are 33 of his original drawings and etchings. A distinction of hardly less importance was his command by the French Government to make three etchings of the Rheims Cathedral during the war. These three etchings, one of the façade, one side-view, and one interior, sketched while the building was under fire and showing the sad destruction wrought by German shells, are now regarded as among the finest reproductions of this famous cathedral, and are treasured by France among the trophies of the war.

At the close of the war another command came to Mr. Orr from the government, this time from Marshal Pétain, to make an etching of the French entering Strasbourg. The resulting picture, which has been reproduced in this country, was shown in the Paris Salon in the spring of last year, and is now in the Louvre Gallery. It is a strikingly beautiful picture showing the entry of the French troops into the ancient capital of Alsace-Lorraine, lavishly adorned with the national colors. In recognition of his services, Mr. Orr has been awarded the Legion of Honor by the French Government.

Mr. Orr's other works include: In the Louvre Museum—Pont Neuf; Rheims Cathedral, façade, south side, and interior; tomb of Admiral Colbert; Hôtel de Sens; Hôtel du Compas d'or. In the Musée de Luxembourg—22 original

pencil drawings and 23 original etchings, including his "Old Paris" series. In the Bibliothèque Nationale—Artist's proof of Colbert's tomb. In the Prince de Broglie Collection—St. Etienne du Mont. In the New York Public Library—Proof of Pont Neuf plate owned by the Louvre, and presented by the French Department of Fine Arts. In the Morgan Memorial Library, Hartford, Conn., Boston Public Library, and many other public and private collections.

### VALUE RECEIVED

In carrying to completion the plans of the Municipal Building Commission, Springfield not only met its civic needs for a generation to come with a degree of satisfaction seldom experienced in municipal expenditure, but in doing so it gained for itself publicity which has probably done more to advertise Springfield in a desirable way than any single exploit in the city's history. Competent judges have pronounced these the finest municipal buildings in America. Including the land it occupies, the municipal group cost \$1,800,000, and the city received full value for every dollar expended.

The campanile serves no practical purpose other than the housing of a large electrically illuminated clock which can be read two miles away, and a \$10,000 set of chimes given by individuals and civic organizations. The group is of steel and reinforced concrete with Indiana limestone facing, with the halls, stairways, and corridors of the administration building of polished marble. The municipal group facing Court Square forms Springfield's civic centre, making not only a most imposing architectural monument, but a beautiful landmark which dominates the landscape for miles around.

The possession of such a fine auditorium has brought to Springfield the very best of music and entertainment, which has served not only to afford its residents entertain-



Detail.

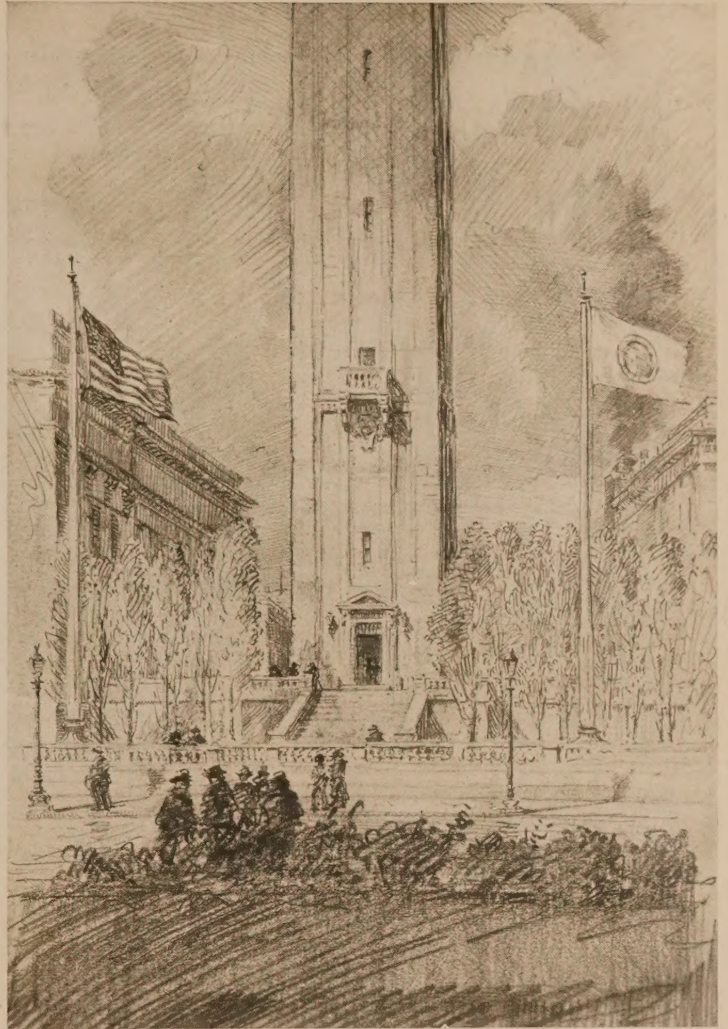


ment of the best sort, but to make Springfield more and more a centre of culture.

Extravagant praise has been bestowed upon the acoustics of the auditorium by distinguished speakers and celebrated artists.

#### SOME OTHER NOTABLE BUILDINGS IN SPRINGFIELD—THE ART CENTRE

Springfield is fortunate in the possession near the centre of the city of an uncommon group of buildings devoted to the arts and sciences. The City Library, the joint gift of Andrew Carnegie and the citizens of Springfield, costing \$350,000 and housing 200,000 books, with a capacity of double that number, is a beautiful white marble building on State Street, and as practical as it is artistic. Immediately west of the library is the Art Museum, which houses the priceless George Walter Vincent Smith Art Collection, representing the life-work of one of the most discriminating connoisseurs of America. To the assembling of this rare collection of porcelain, cloisonné, bronzes, jades, iron, lacquer and ivory, ancient armor, illuminated manuscripts, fine laces, embroideries, and Oriental rugs, Mr. Smith has devoted his long and busy life, and this collection he has now given to the city. The building, an Italian Renaissance structure of unusual character and beauty, was designed by the late Walter Tallant Owen, a brilliant young Springfield architect. This building was made possible by a bequest of \$50,000 from the late Horace Smith and subscriptions of \$90,000 made by public-spirited individuals and business concerns. Still farther west in the same group is the Science Museum, where are shown very complete and well-arranged zoological and ornithological exhibits, nearly all the donations of Springfield's citizens. Most notable of this entire educational group is the famous statue of "The Puritan" by Augustus St. Gaudens in Merrick Park, on the corner of State and Chestnut Streets. This impressive statue, commonly called "Deacon Chapin," was erected by the late Chester W. Chapin, then president of the Boston & Albany Railroad, in honor of Samuel Chapin, one of the founders of Springfield and a deacon in the old First Church. It is re-



Detail.

garded as one of the best creations of the brilliant St. Gaudens, and a cast of it in the Luxembourg ranks it in France with the foremost sculptures of the day.



The bells of the chimes were given by individuals and civic organizations.



# Home Ownership on a Pay Envelope

National Housing Programme of the Young Women's Christian Association Seeks to Make the Road Easy for the Small Investor and Popularize the "Cottage Apartment" or "Kitchenette House." Believe Big Demand for the Very Small House with No Surplus Space to Buy, Build, Care for, or Heat! Proposed Suburban Project Outlined by Architect

*By Wm. F. Thompson, Architect*

National Board Young Women's Christian Association, New York City

**I**F a building "map" could be worked out, charting the way to the ownership of the very small house built to order at the smallest outlay possible, would it not be a stimulus toward releasing for the building and construction market small investors who are now holding off as much from intimidation as high prices?

As part of their national housing programme, particularly for professional and business women of every class (in which sixty-six communities are already actively considering possibilities, making surveys, raising money, or already engaged in construction), the Young Women's Christian Association has undertaken to promote the building of the "cottage apartments," cut to fit the young married couple or salaried young women who yearn for a home of their own. The proposed suburban project which has their indorsement is not only interesting as a business proposition but because it is the first attempt to put across the so-called "kitchenette" type of house, so dubbed because it is cut to fit the "beginning" married couple or the lone young woman's needs in space as well as purse.

The idea of this proposed development is to "scale down" home ownership to the requirements of thousands of home-lovers who, because of their stringent cash limitations and inexperience, are now unnecessarily staying out of the building field; to demonstrate to them on an actual working basis how to go ahead.

In order to do this, it is proposed to purchase a piece of property, in this case about 325 by 600 feet, the initial cost of which will be equally divided among the twenty-six owners, giving each a plot of 40 by 125 feet, and allowing sufficient property for the main drive and two service drives, for the building of a wall or fence, together with gate-posts and space for planting at the entrance, and also space for two tennis-courts, a recreation building, and the pergolas on either side.

The persons desiring to enter into this co-operative scheme will find it more economical and desirable for the following reasons: First, the property is purchased in one large block, and they obtain the benefit of this; second, the twenty-six houses are built at one time, thus effecting a saving, in giving out the contract to one contractor; third, their neighbors will be carefully selected, since only well-recommended persons may obtain the privilege of building their home in this community. Further, there is a recreation building with the tennis-courts, and there is also ample space at the rear of each plot of ground for the erection of a garage.

At the present cost of construction (attention should be called to the fact of falling prices) these houses and plots will cost about \$5,000 apiece. If two persons erect a house together, the outlay per person (half cash and balance on mortgage) falls to \$1,250, or less than several years' rental.

Other than in an advisory manner, the Young Women's Christian Association purposes to have absolutely no control in this project. It is co-operative only in the purchase of the property and construction for the saving involved. After

that the ownership is to be individual and free. In this manner any group of owners can pocket the considerable savings that in developments of this kind generally go to the real-estate promoter.

It will, however, be necessary to have some form of agreement so as to maintain the roads, the tennis-courts, and the recreation building, as well as the entrance-gates and the general planting. And, further, I would recommend that if one of the owners desires to sell, that the purchase must be approved by the balance of the owners. This is so as to keep out undesirable owners, who will materially lower the standard of a section of this kind.

The scheme as outlined above is shown on the plot plan with this article. There are also two building plans—one for a cottage apartment and the other for a six-room house.

The cottage apartment illustrated is a unique plan, inasmuch as it is designed primarily for one or two persons, the idea being that the living-room is used as a sleeping-room, and therefore bath and dressing room has been shown on the first floor as well as the kitchen. There is, however, a possibility of having one room up-stairs finished off later, if this is found desirable.

The large bath and dressing room with the window placed as shown should prove very useful. The arrangement of the kitchen is worthy of mention, inasmuch as the range, sink, and refrigerator are on one side, thus simplifying the work in this room. The refrigerator is iced from the outside, and the kitchen is sufficiently large so that it could very well be used for meals, especially for one or two persons.

This is getting the house down to its lowest terms, and I believe that a ready market can be found for buildings of this type, which, as the perspective will show, can be designed attractively and given some character, and at the same time be economical to build.

The six-room house is extremely low in cubage for the number of rooms and their size.

In this plan the usual hall has been eliminated, thus allowing for a larger living-room, and personally I believe that a very fine effect can be obtained by having the stair to the second floor start from the living-room. The well-located fireplace will afford a good elevation and also an interesting interior, and you will notice that there is ample wall space for furniture.

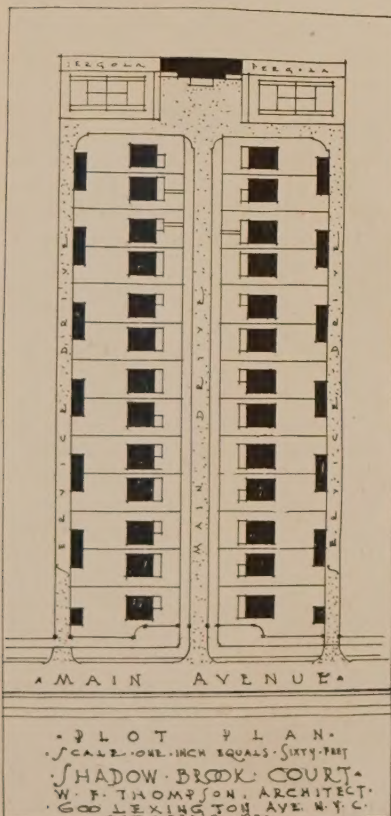
The veranda, being 8 by 25 feet, is ample, and the idea is to have it permanently glazed and screened, so that, like the sedan car, it is for all seasons.

The dining-room is placed, as shown on the drawing, so that this room can have a view of the street, and at the same time be directly off the veranda.

The kitchen is so designed that the range, sink with drain-board, refrigerator, and china-closet are all on one side. There are windows on two sides, which afford a cross-draft, and ample space on the opposite wall for kitchen-table and a large pot-closet, which can also be used for supplies.

The entry leads out into the yard and down into the





cellar, and contains a small closet for brooms, etc. There is also a coat-closet off the living-room.

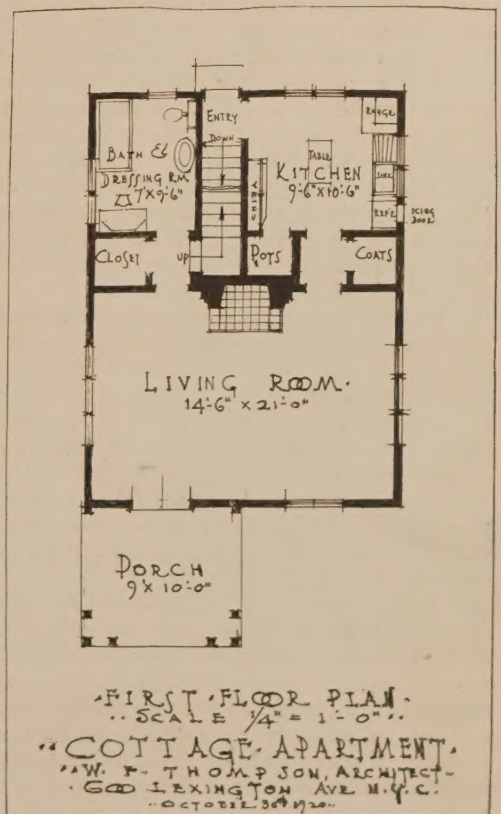
The second-floor plan shows three bedrooms with a very large closet for each, together with two closets in the hall and a storage-closet off the stair-landing. There is no attic to this house, but there are nine closets, and the cellar will afford additional storage space.

From the arrangement of the windows, as shown on the drawings, it is evident that good elevations can be obtained.

The bathroom is directly over the kitchen, which will simplify the plumbing and make it more economical. There is another point in that each room has a cross-draft, including the small rear bedroom, for the windows, as shown, can be opened onto the stair-hall, and it can in turn be ventilated by the exterior windows.

The cellar plan in each case contains a small heating-

(Continued on page 374.)





# St. Mark's Church, Mount Kisco

By Ernest Peixotto

TO the July number of *ARCHITECTURE*, I contributed an article on St. Thomas's Church on Fifth Avenue, New York City. In this article, I failed to attribute a proper share of the credit that is due to Mr. Ralph Adams Cram for his part in the designing of that very remarkable church.

My attention has been drawn to this fact and I am now indeed glad to be able to correct the statement that I made in that article that the church, "as we see it today, is essentially Mr. Goodhue's." Just which part of the credit for its success should belong to the individual members of the firm of Cram, Goodhue, and Ferguson it would be difficult to determine, but it is clear that both Mr. Cram and Mr. Ferguson should have been given each his full share of credit in the completed work.

The plans for the church of St. Mark's at Mount Kisco, New York,

were also drawn when the firm was still Cram, Goodhue, and Ferguson, but again, at a later date, Mr. Goodhue took charge of the building of the church, an edifice that, in my opinion, might well serve as a model for our smaller parish churches in America. Undoubtedly, the fact that it has a number of wealthy parishioners has made it possible for St. Mark's to possess a certain number of features that the ordinary country church could not aspire to. But, built as it is, of a simple granitic field stone, its fine proportions, its beauty of line and mass, could well be copied as a fitting type of church for congregations that adhere to and maintain the old Anglican tradition.

Its west front is almost entirely filled by a robust tower, square-topped, and pierced only by a few narrow windows. Engaged in this tower on its north side, is an octagonal *tourrelle* that ties also to the buttressed roof of the north aisle, so that, viewed from the northwest, especially when the leaves have fallen from the tree that stands in that angle of the church, the composition piles up in a very picturesque way, with the two porches, the small tower and its larger neighbor, forming a very handsome mass that is tied to the ground by the low long line of the rector's study and the choir rooms.

Though the church was built in 1909, the main tower, called "The Peace Tower," was not added until last year, and, of course, it has greatly enhanced the general effectiveness of the edifice, which, otherwise, is quite plain, the masses of its rough-laid stone being broken only by simple and rather small paired windows in the aisles and clear-story. The roof is made of heavy slabs of slate, whose grays and purples harmonize effectively with the general color of the stonework.

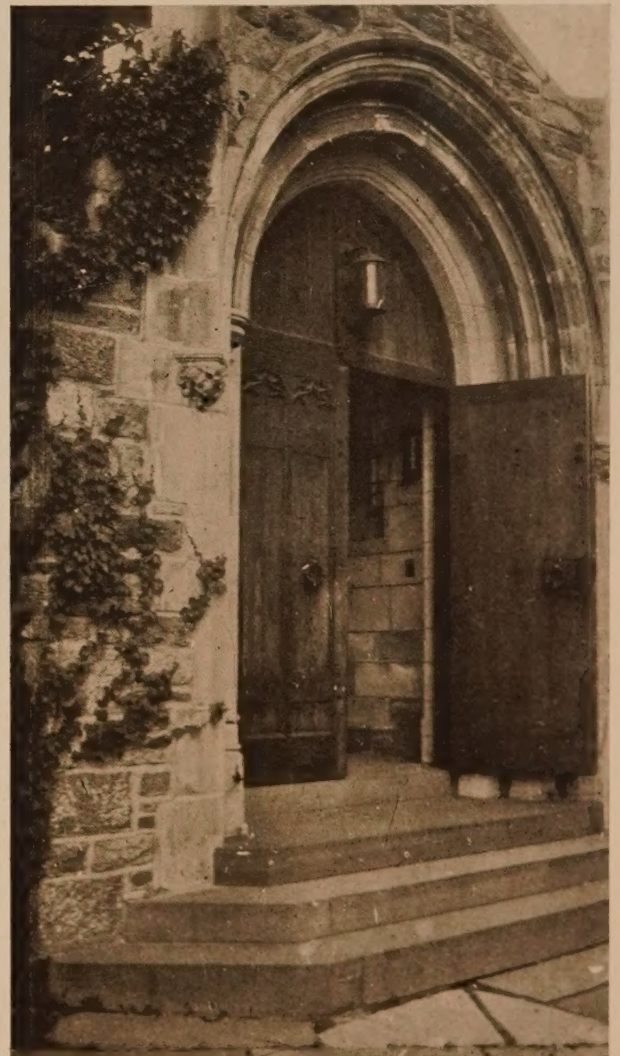
The oaken doors of the west porch admit one to a small, stone-vaulted chamber that precedes a vestibule panelled in oak.

The nave is simple but rich in effect. Three massive pillars at each side, support the pointed arches of the main walls. These six piers are slightly varied in form, four of them being round, one being octagonal and the other ribbed with perpendicular lines that give it, too, the effect of an octagon. The entire nave is paved with old flagstones, carefully chosen and laid, and its plain oaken pews seat about three hundred people. There is an aisle along the north side of the nave, but none on the south side, though I am told that a south aisle is shortly to be added. The beams and trusses of the roof are plainly exposed and make a fine effect.

The nave is separated from the choir by an exceptionally handsome rood-screen of carved oak. Its elaborate and exquisite detail of the richest late Gothic type, its slender arches and delicate cornice and parapet, contrast most hap-



The lectern.







View into chantry from aisle.



The organ from the sanctuary.

pily with the simplicity of the stone surfaces about it, and through its traceries one sees the handsome mullioned window that pierces the east end of the church above the altar.

At the right end of the rood-screen stands a beautiful pulpit, also in oak, the gift of A. W. Butler, the rood-screen itself having been given to the church by Robert S. Brewster. The choir-stalls were a gift from Doctor Allen M. Starr in memory of his son, while the bishop's chair, to the left of the altar, was given by Mrs. William Sloane in memory of Bishop Greer. The delicate screens that separate the chancel from the chapel that adjoins it, were the gift of the Altar Guild. Among other gifts are the lectern by Mr. Henry J. Whitehouse in memory of his father, entrance screen to the chapel by Mr. Hamilton L. Hoppin, the altar by Mrs. E. N. Potter in memory of her father, Mr. John T. Atterbury.

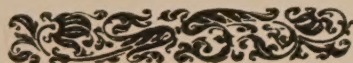
All this woodwork is unusually beautiful in design and finish, and shows the same careful craftsmanship that distinguishes the choir furniture at St. Thomas's, it having been made, in fact, by the same firm of wood-carvers.

Mr. Goodhue's genius for the designing and placing of ornament is everywhere apparent in this exquisite little church. The woodwork that I have mentioned; the doors that admit to the north porch and to the sacristy and rob-

ing-rooms for the choir; the linen fold panels in the priest's sacristy; the vestibule screen that supports the choir gallery at the west end of the nave are all, despite their elaboration and richness, evidences of his fine restraint and unerring sense of good taste in design. The ornament in stone is limited to a very few details, two corbels that support the main arch at the entrance to the choir and the figure of St. Mark above the main entrance of the tower by Mr. Lee O. Laurie being the only pieces of sculpture used. The lighting fixtures are very simple and appropriate, and the glass harmonizes well with the general character of the church.



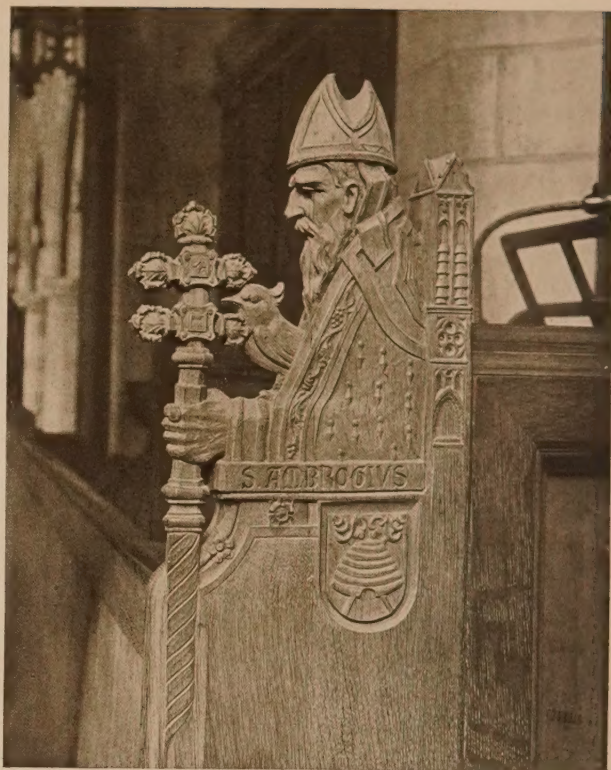
The pulpit.



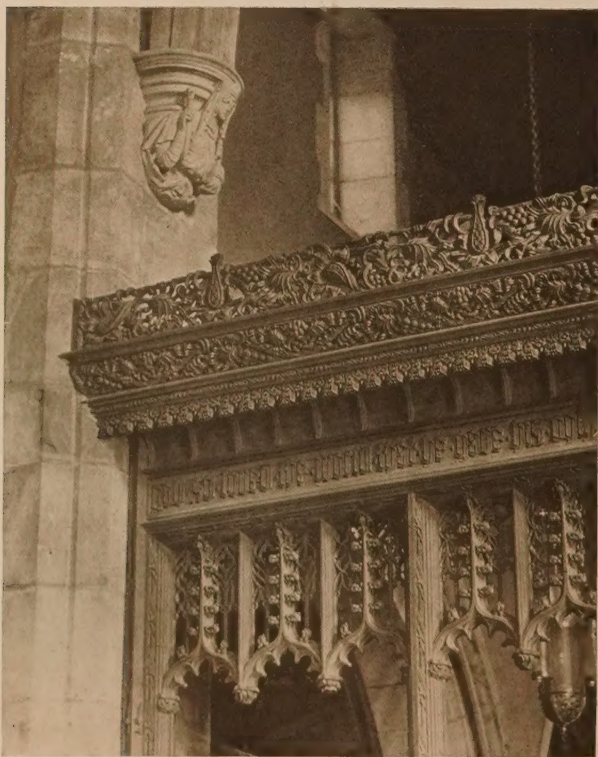




DETAIL CHOIR STALL END.



DETAIL OF STALL ENDS.



DETAIL OF CHOIR SCREEN.



DETAIL OF BISHOP'S CHAIR. (Representing Consecration of First American Bishops.)

DETAILS OF CARVING IN ST. MARK'S CHURCH, MT. KISCO, N. Y.



## Editorial and Other Comment

### *Some Significant Cost Facts*

THERE has been a mass of illuminating evidence brought out in New York's investigation of the building situation, and the end is not yet in sight. But even without the extraordinary conditions there revealed, there are some plain facts regarding labor costs that are of startling significance. From the associated employers of Indiana comes the following information with regard to the work and pay of bricklayers that affords one answer to present conditions. The figures showing the different wage rates and production records apply in a measure to every other trade concerned in building.

YEAR	RATE AN HOUR	BRICKS A DAY
1909.....	\$0.55	1,100
1916.....	.65	900
1918.....	.80	614
1919.....	1.00	587
1920.....	1.25	541

While the pay has gone up from 55 cents to \$1.25 an hour, the cost has risen from \$4.40 for the laying of 1,100 bricks to \$10.00 for 541 bricks.

From \$4.00 a thousand to \$18.50 a thousand! The same standards have influenced everything we buy. High wages and diminished production are responsible for the high cost of all things. It is labor itself that feels the pinch with the rest of us, and there are plenty of indications that unless labor wakes up and proceeds to do an honest and full day's work for a day's pay, that half-time and even shut-downs will be the only equalizing remedies.

We do not believe that the great majority of labor is without a sense of fairness and honor, and we are inclined to think that there are hopeful signs in the efforts of labor organizations to get rid of the alien and professional agitators, whose voices have been too loud in the land of their adoption.

### *A Lesson from Springfield*

IF business and not beauty may have been the foundation motive for the building of the now-famous Springfield Municipal Group, its beauty and distinction have been the things that have made it return bounties in the way of wide publicity and consequent business. The city's business is conducted in convenient and beautiful offices, and the great auditorium, one of the finest in the country, noted for its incomparable acoustics, has been the meeting-place for many conventions and the scene of concerts by the best orchestras and some of the greatest singers in the country.

No one who passes through Springfield by train or auto can miss seeing the tall gray tower; it stands out an enticing landmark from all the country round about. And to stand

in the square facing the tower with its two balanced buildings of classic design is to get an impression of beauty and dignity in architecture that few observers will forget.

We go to Europe and make a business of seeing as much of the famous architecture as we can, it is a part of the European formula, a part of the culture we are expected to bring back with us. We buy photographs and prints of Venetian palaces, of Greek temples, of great churches, famous galleries, and come home and hide them away after a while and forget them.

What a pity it is that the general public is not more observant of the good examples of architecture that lie near at home. It is a good thing for Springfield to show its appreciation of its own fine group by having it etched by Mr. Orr. It shows both a becoming pride and a high sense of the value of making it better known in a sister art. As only fifty proofs are to be made and the plate destroyed, in time it will become a rare old print of a famous classic building of the twentieth century.

We are privileged to reproduce Mr. Orr's drawing, frontispiece, for the complete etching of the group together with a number of his interesting sketches of details.

### *Mortgage Exemption*

THE National Real Estate Legislative Committee is now a fixed Washington institution, and it will keep a sharp eye on all laws that concern real-estate ownership. At a recent meeting Mr. Walter Stabler, a member of the committee, made the following remarks with regard to the question of exemption of mortgages from the income tax:

"When a gross interest rate of 6 per cent is reduced by income taxes to a net of 2 to 3 per cent," said Mr. Stabler, "the non-taxable municipal or State or county or school or even road bonds paying 4½ to 5 per cent are naturally preferred, and as a result untold millions are being removed from the real-estate-mortgage market.

"In the past," Mr. Stabler said, "mortgage money has come very largely from individuals and estates, but this source is being dammed up by the income levy. The life-insurance companies, not being subject to taxation in the same way as individuals, are lending to the limit of their ability, but the best they can do, is 'but a drop in the bucket.' This is also true concerning savings-banks.

"In the final analysis," Mr. Stabler pointed out, "the chief sufferers from this situation are the tenants, who go to make up the vast proportion of the population in the cities and towns of the United States, for the consequent stagnation in building has forced up their rents.

"This condition is one of the greatest breeders of discontent," said Mr. Stabler. "It hits the masses and the persons of moderate incomes and especially those of fixed incomes. They are helpless with income stationary and out-



go increasing. This situation must be changed; these people must have their burdens lightened or we will face greater discontent than now exists."

In conclusion Mr. Stabler said that "The only remedy lies in convincing Congress that the passage of a tax-exemption measure is needed to bring 'the vanishing funds back into real-estate loans.'"

The question is one for serious discussion, one that needs to consider carefully the effect upon the future as well as the present.

A reorganization of the present income taxes will have a bearing on the problem, and maybe it would be as well to wait until we see what the new administration is going to do about it. Something must be done if we are to have building adequate to needs.

### For Better Housing

A Letter from the President of the Illinois Chapter of the American Institute of Architects Addressed to the Profession

Chicago, November 23.

DEAR SIR:

The American Institute of Architects realizes that the architectural profession and the services it can render to society are not properly appreciated by the people, greatly to the detriment of the profession and the community.

The architectural profession has not received as much public recognition as other professions because it has not hitherto performed as much public service. The logical way to keep the value of architectural services in the minds of the people is to do some conspicuous public good.

The country is now confronted with a lack of private initiative in home-building and home ownership. The government is beginning to realize that homeless citizens and families, whether rich or poor, are not potentially the best citizens—that every additional home owner makes an additional credit possibility, an additional property security to the nation's wealth, and an additional urge for all other forms of permanent construction.

With a view to stimulating home building and home ownership, "Own Your Home" Expositions have been inaugurated to be held in various large centres to show the people the value of a good home and how to obtain it. Realizing that the majority of homes are not designed by the most competent architects, and that small-house plans are not usually profitable work for the established architect, the architects will make their contribution to this movement at present in the form of a Small House Competition.

You are invited to participate in this movement and send in the best solution of the small-house problem that can be devised for your particular locality.

You will notice that the cash prizes to be awarded are considerable, and that the other prize conditions are even more important to the architectural profession. The plans securing the prizes will be widely published, will be made available, complete with specifications ready for execution, at small cost to home owners, architects, and builders. These plans will bear the architect's name and address so that he may receive not only compensation for every reproduction of his plan, but may be placed in contact with the builder. Furthermore, arrangements are being made to reproduce the first-prize designs in the Exposition in facsimile and other prize designs in small models. One large house-furnishing store has offered to reproduce the prize designs in full size, furnished and decorated, in their store, and it is expected that other stores throughout the country will do similar service.

We trust that you will consider this matter of enough value to yourself, the profession, and the public to prepare and send a

design which will be the best that your combined office force can produce. If you cannot participate, will you be kind enough to hand this programme to some draftsman who would be competent to participate.

Yours very truly,  
HENRY K. HOLSMAN, *Architectural Adviser.*

### The Architectural League Exhibition in the Metropolitan Museum of Art

THROUGH the courtesy of the Park Commission of the city of New York, with the cordial consent of the trustees of the Museum, the Architectural League of New York has undertaken to hold its Annual Exhibition of Architecture and the Allied Arts in the unfinished south wing of the Metropolitan Museum of Art.

The exhibition will be opened about March 25 and will close April 26, 1921.

We ask your co-operation in making this the most notable exposition of recent progress in the arts of design that has ever been held in New York.

Detailed circulars of information regarding the exhibition will be sent later.

J. MONROE HEWLETT,                      LAWRENCE GRANT WHITE,  
*President.*                                      *Secretary.*

### Book Reviews

OLD ENGLISH FURNITURE AND ITS SURROUNDINGS FROM THE RESTORATION TO THE REGENCY. By MACIVER PERCIVAL. Charles Scribner's Sons, New York.

There have been many books published on Old Furniture, all of them with an interest for the collector and the amateur, for the architect and the decorator. We need not name them nor have we space, but we can commend as of special interest and value this book. It is a book of moderate size with a text that flows on gracefully and informing through a field of illustrations from both photographs and drawings. The book is especially valuable for the amount of information it gives regarding the appropriate surroundings of good furniture, such things as Table Appointments, Upholstery, Wall and Floor Coverings, various Decorative Adjuncts. For instance, Delftware, Glass, Spoons, Candlesticks, Hangings, Pottery, Panelling, Stairways, Floors, Fireplaces, Mirrors, Brasses, Pictures, Chimneypieces, Furniture Coverings, etc.

It is a book for every one interested in the better co-ordination of period furniture and minor details of a tastefully furnished house.

THE BOOK OF NEW YORK. By ROBERT SHACKLETON. The Penn Publishing Company, Philadelphia.

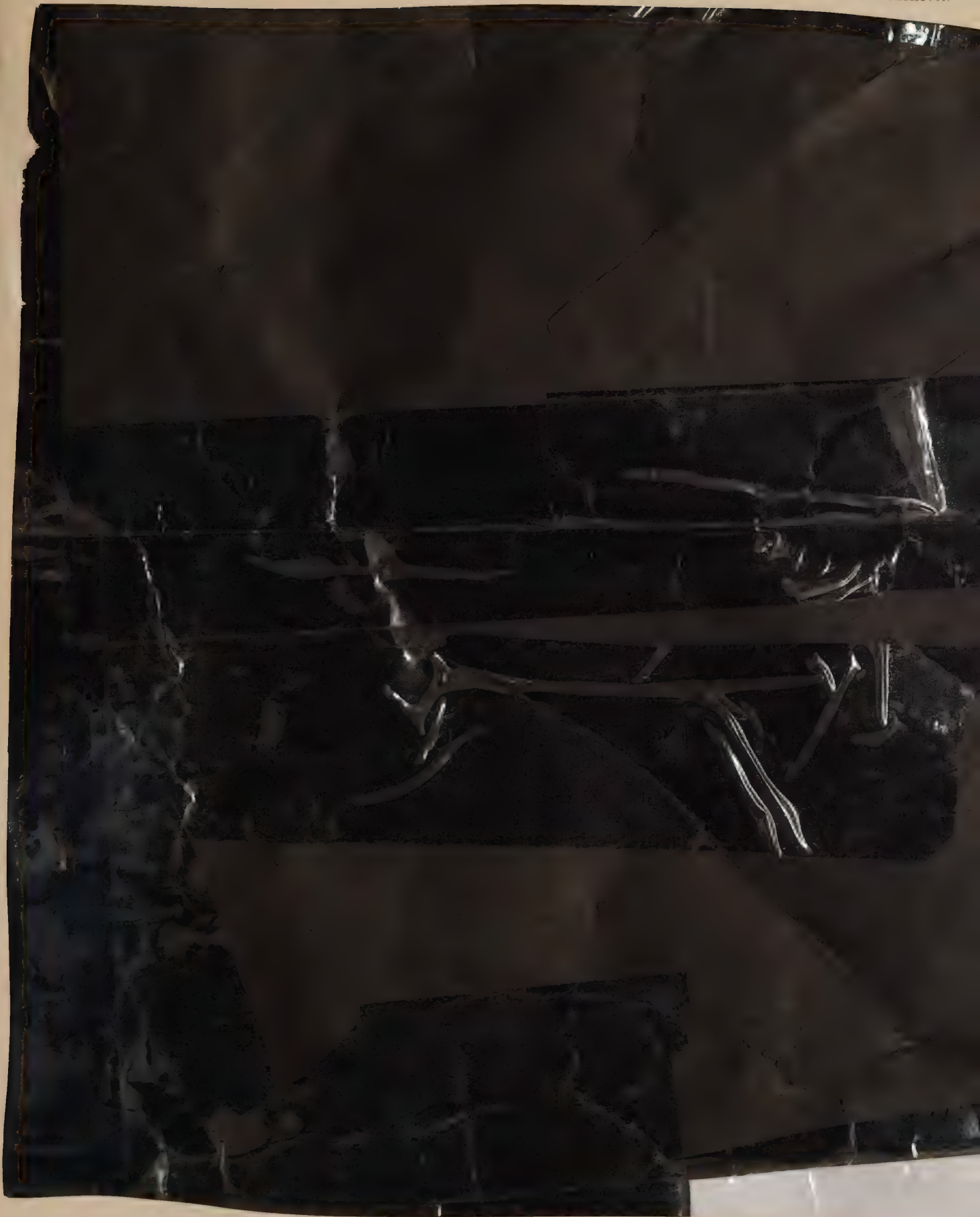
Essentially a story of New York from the view-point of one interested in its changing human aspects, it is yet a source of much valuable information regarding the city's wonderful growth, and is concerned with many famous districts and buildings of interest to all who would follow the history of New York's ever-changing architectural aspects. It points out our great towers of business, the homes of the rich, and dwells upon the beauties of such classics as the City Hall, the Jumel and Van Cortlandt mansions. Of the Woolworth Building, the author says: "It is a noble building in its dignity and its fine simplicity, and points out, if the fact needs any pointing out, that a sky-scraper may be not only a thing of necessity, in a city developing as New York develops, but a thing of beauty."

TECHNIQUES OF PRACTICAL DRAWING. For Teachers, Students, and Professional Artists. By EDWARD S. PILSWORTH. 16mo. Illustrated. The Macmillan Company, New York.

Here is a book of practical value to every student and worker in the arts, especially to those who are engaged in making drawings for reproduction, either in the form of illustrations or in the ever-widening field of purely commercial endeavor. Many young artists miss opportunities for a profitable use of this talent by a lack of knowledge regarding the technical requirements for reproduction. The commercial artist needs to know just the things that this book deals with in a direct and helpful way.

The subjects dealt with are: "Pencil Technique," "Pen Technique," "The Technique of the Brush."





The Tower, Screens for Chapel and Vestibule by Bertram G. Goodhue, architect.









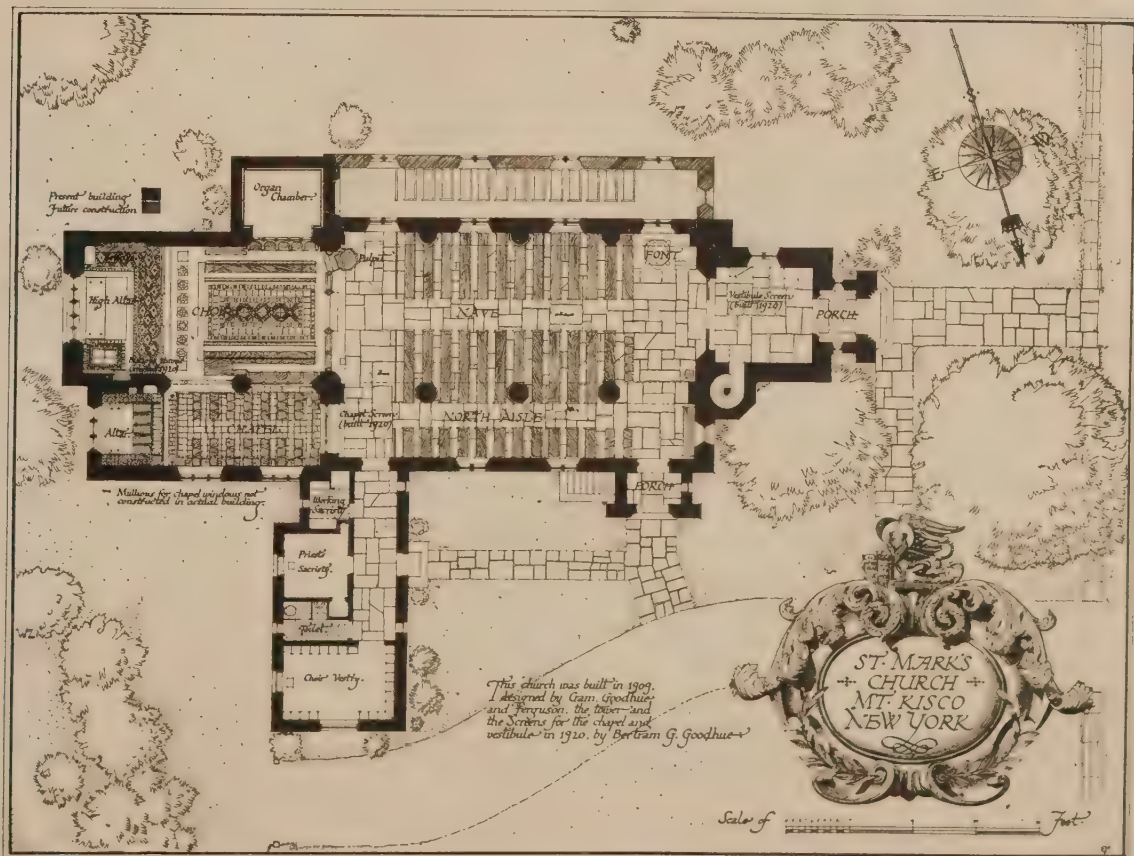
ST. MARK'S CHURCH, MT. KISCO, N. Y.

Church designed by Cram, Goodhue & Ferguson, Architects.  
The Tower, Screens for Chapel and Vestibule by Bertram G. Goodhue, Architect.

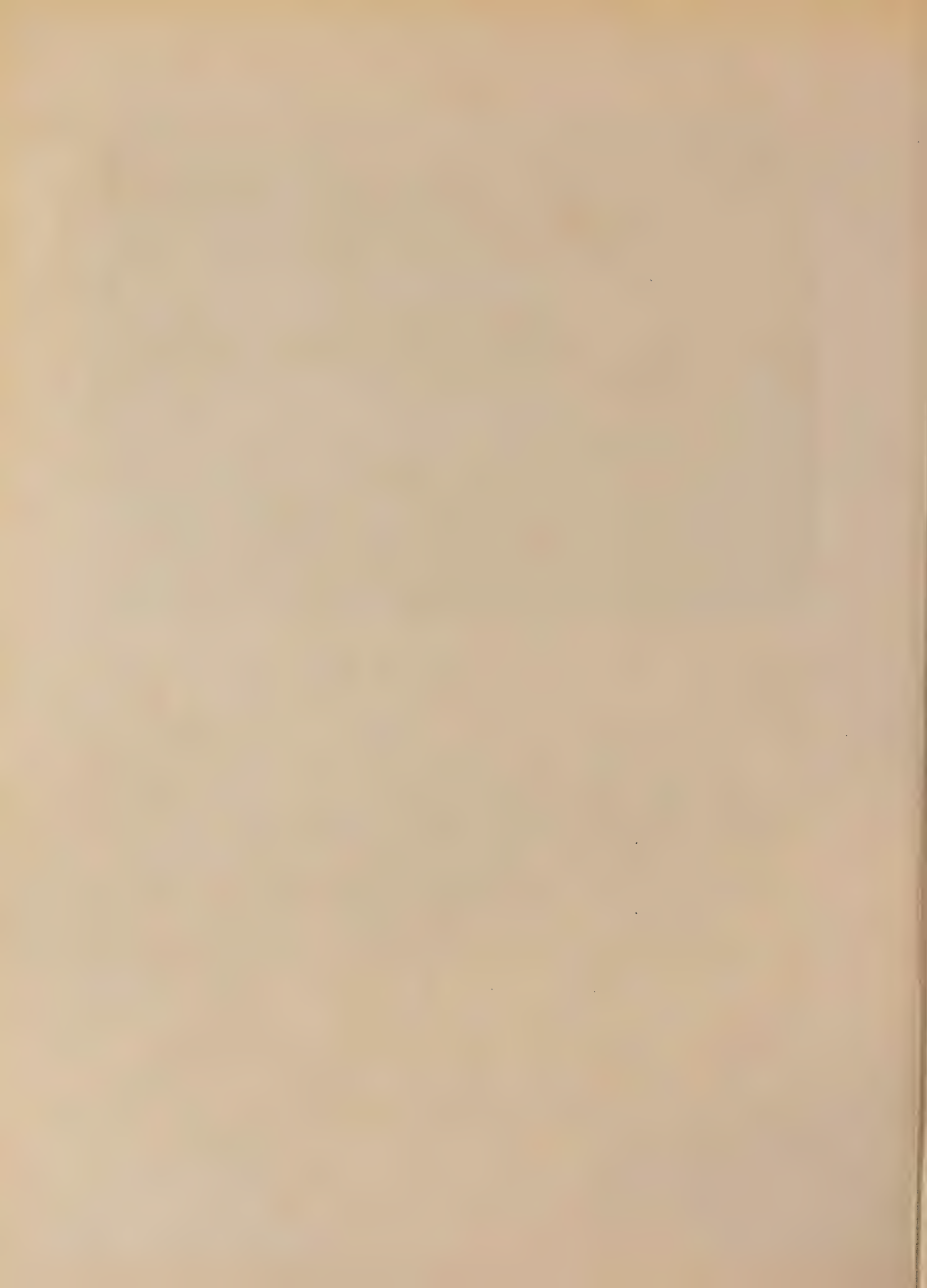
















INTERIOR ST. MARK'S CHURCH, MT. KISCO, N. Y.

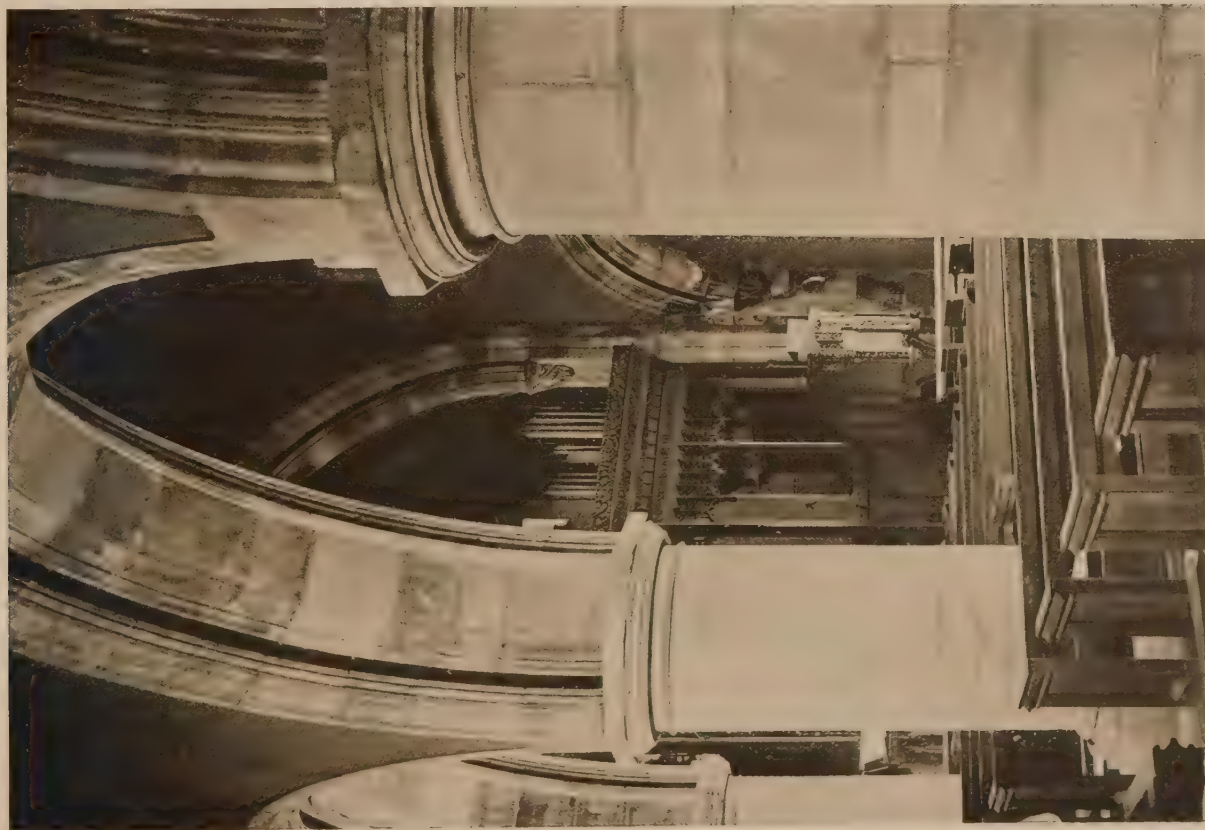
Church designed by Cram, Goodhue & Ferguson, Architects.

The Tower, Screens for Chapel and Vestibule by Bertram G. Goodhue, Architect.

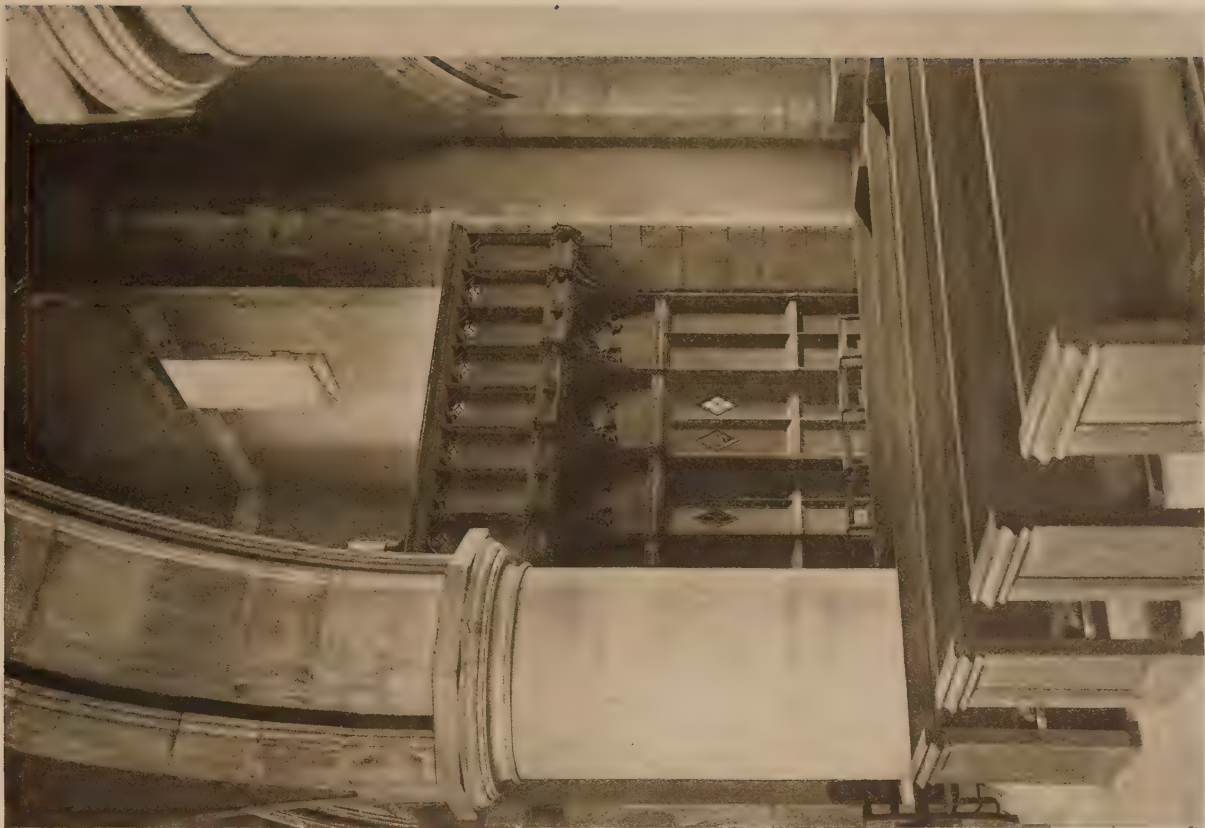








PULPIT AND SCREEN FROM NORTH SIDE.



INTERIOR, TOWARD THE TOWER, SHOWING VESTIBULE PANELLING AND GALLERY FRONT.

ST. MARK'S CHURCH, MT. KISCO, N. Y.  
Church designed by Cram, Goodhue & Ferguson, Architects. The Tower, Screens for Chapel and Vestibule by Bertram G. Goodhue, Architect.







DECEMBER, 1920.

ARCHITECTURE

PLATE CLXXXII.



RESIDENCE, L. COZENS, LOCUST VALLEY, LONG ISLAND, N. Y.

Rouse & Goldstone, Architects.









ENTRANCE.

RESIDENCE, I. COZZENS, LOCUST VALLEY, LONG ISLAND, N. Y.



PORTICO.

Rouse & Goldstone, Architects.

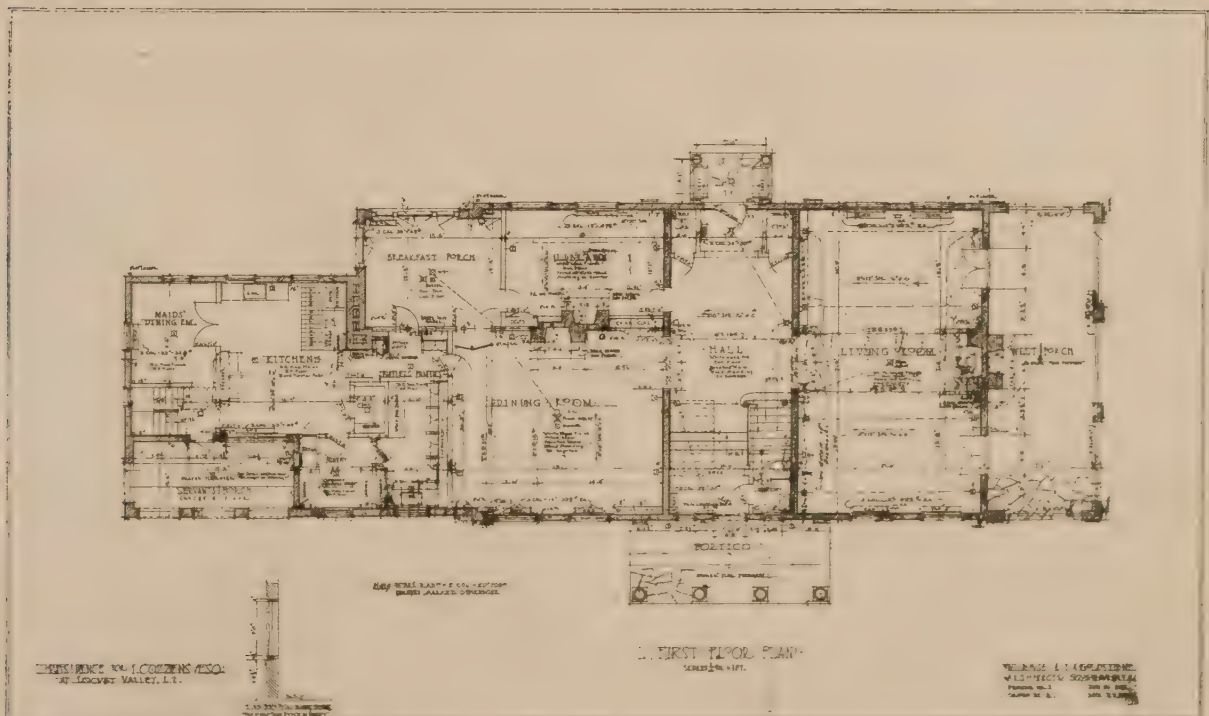








HALL.



RESIDENCE, I. COZZENS, LOCUST VALLEY, LONG ISLAND, N. Y.

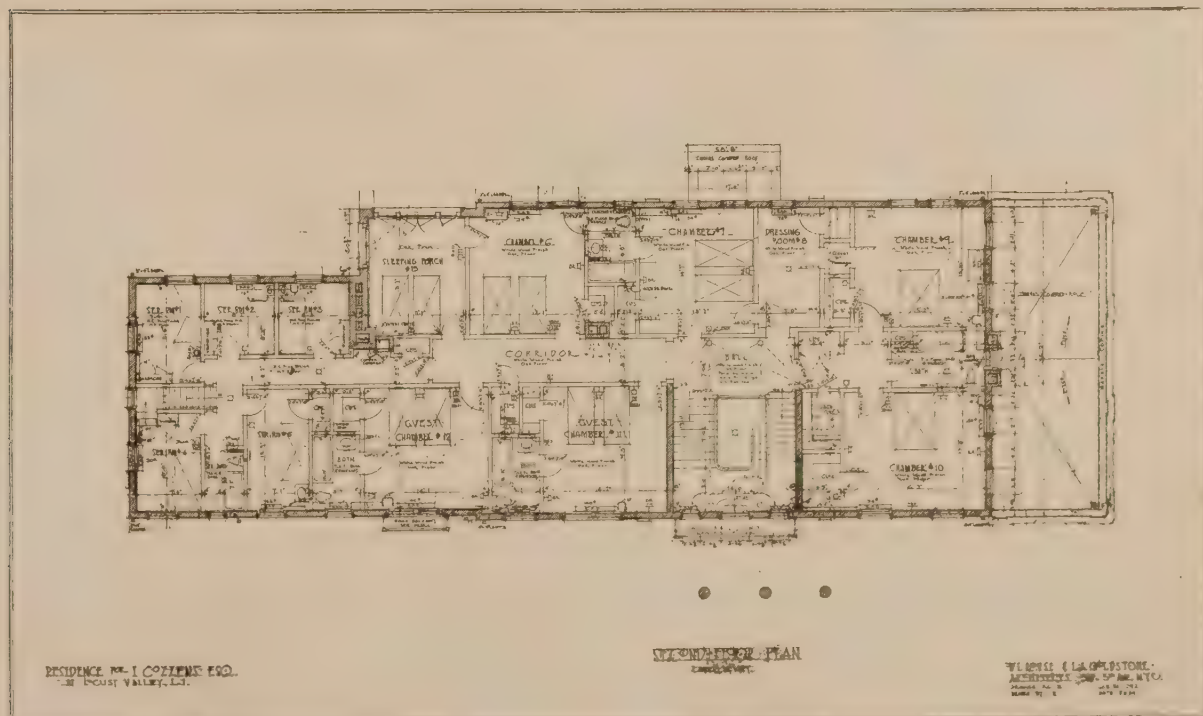
Rouse & Goldstone, Architects.







LIVING-ROOM.

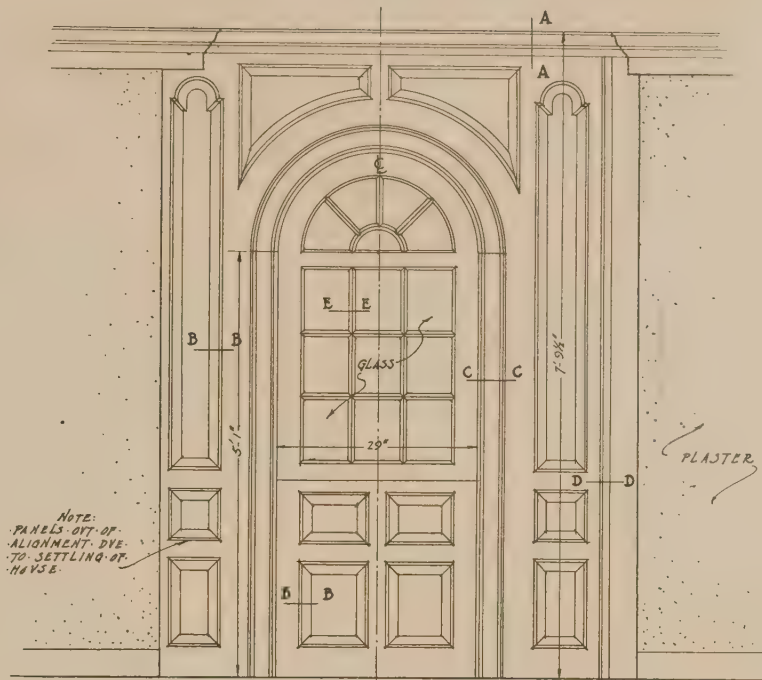


RESIDENCE, I. COZZENS, LOCUST VALLEY, LONG ISLAND, N. Y.

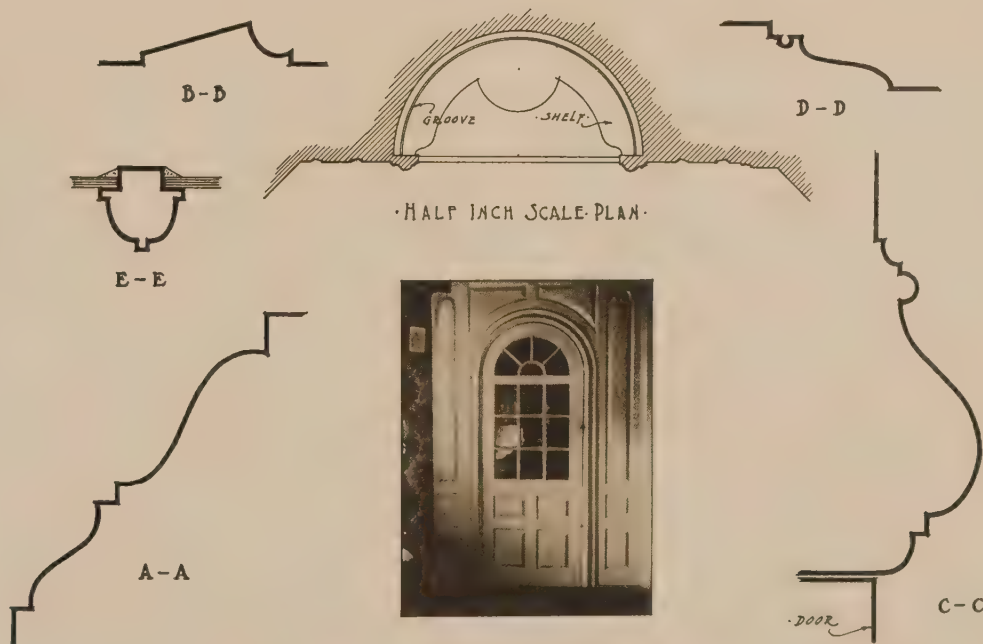
Rouse & Goldstone, Architects.







· HALF INCH SCALE ELEVATION ·



· ALL MOULDINGS ARE SHOWN ONE HALF FULL SIZE ·

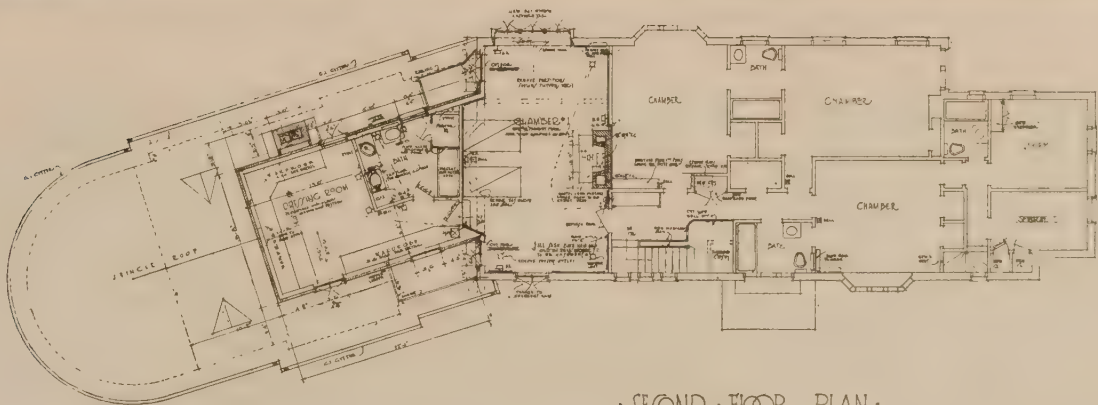
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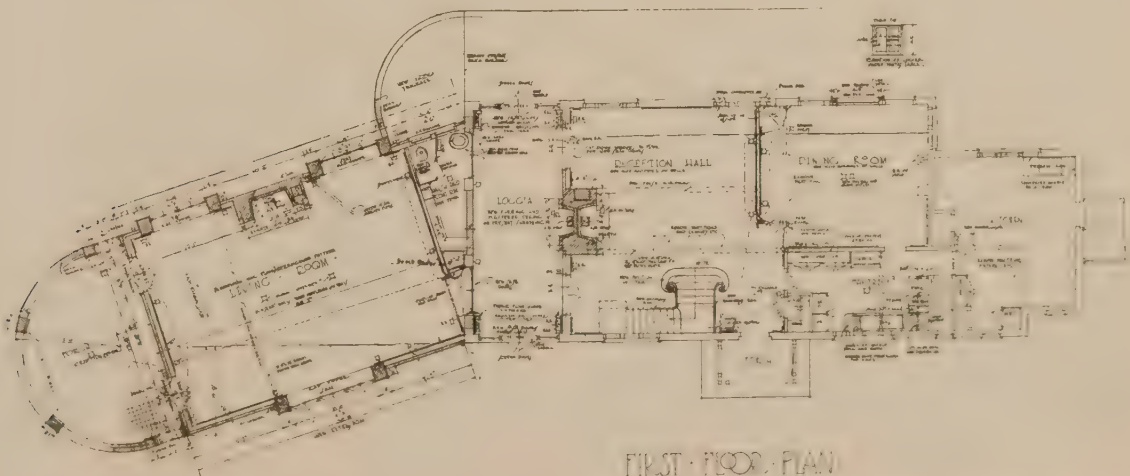
· MEASURED · BY ·  
· J. FREDERICK KELLY ·  
· DRAWN · BY ·  
· LORENZO HAMILTON ·







• SECOND FLOOR PLAN •



FIRST FLOOR PLAN

RESIDENCE, AUGUSTA HAYS LYON, HUNTINGTON, LONG ISLAND, N. Y.

Rouse & Goldstone, Architects.







LIVING-ROOM.



HALL.

Rouse & Goldstone, Architects.

RESIDENCE, AUGUSTA HAYS LYON, HUNTINGTON, LONG ISLAND, N. Y.





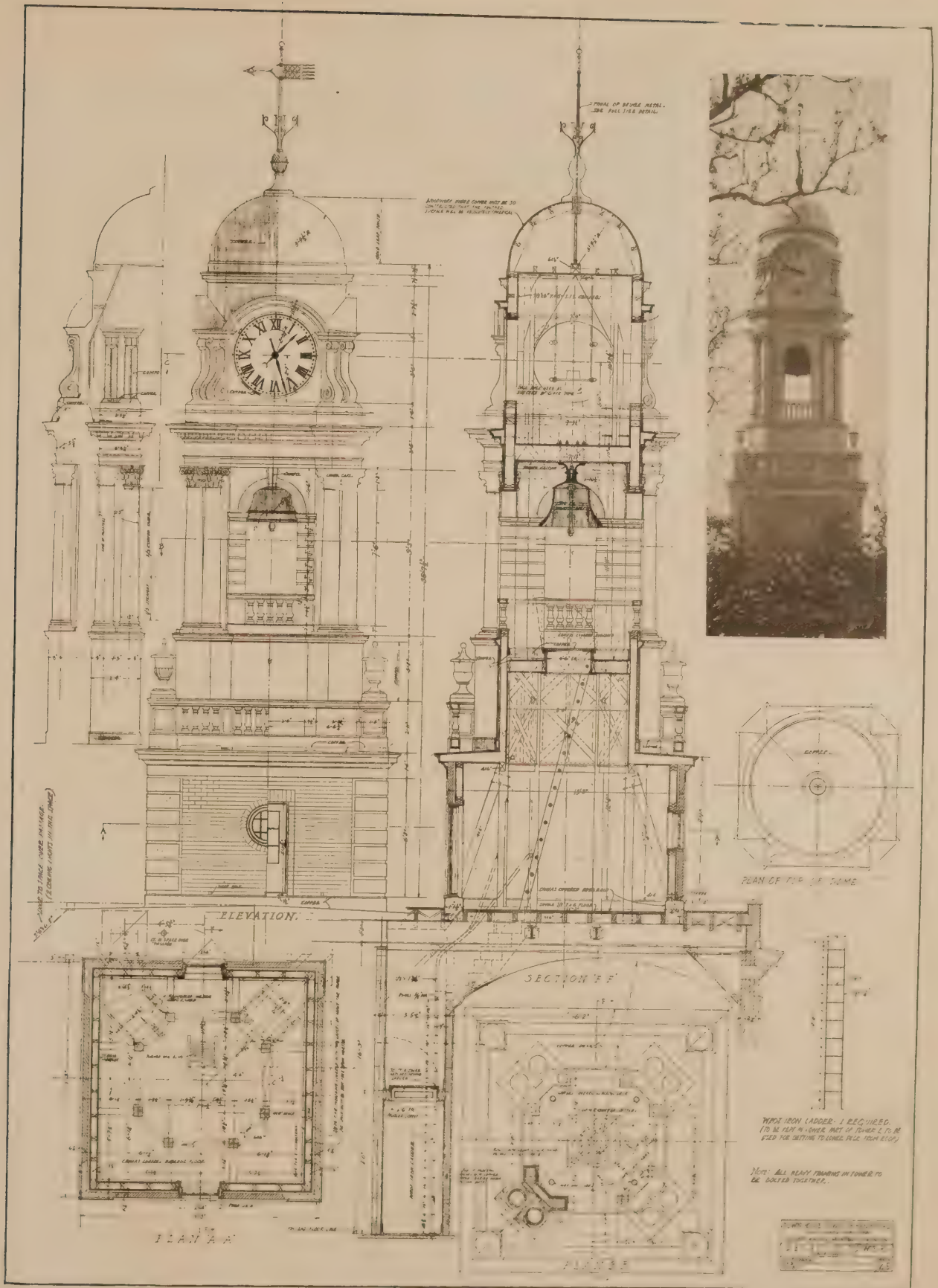


TOWN HOUSE, HEMPSTEAD, LONG ISLAND, N. Y.

Steward Wagner, Architect.





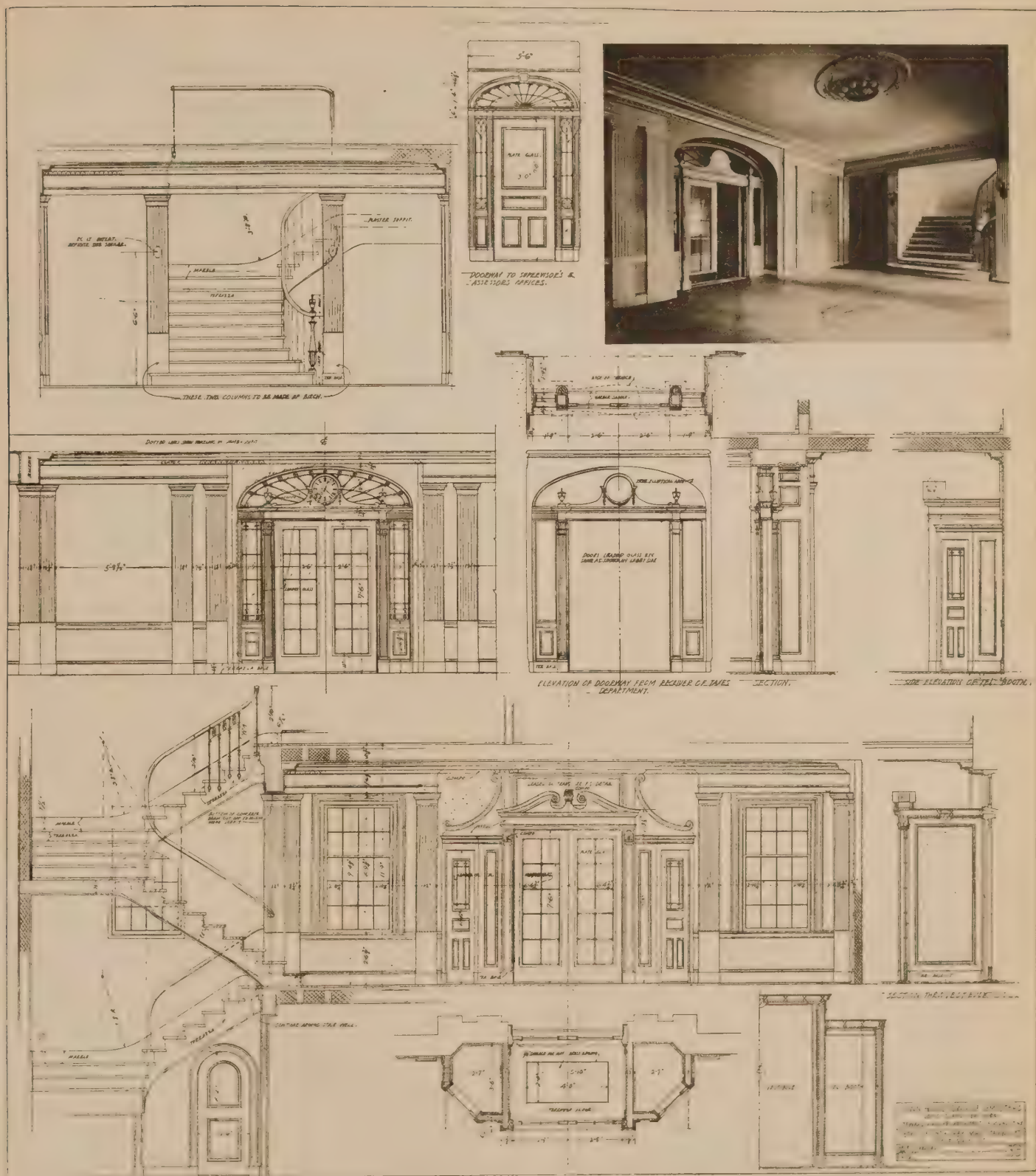


DETAIL OF TOWER, TOWN HOUSE, HEMPSTEAD, LONG ISLAND, N. Y.

Steward Wagner, Architect.



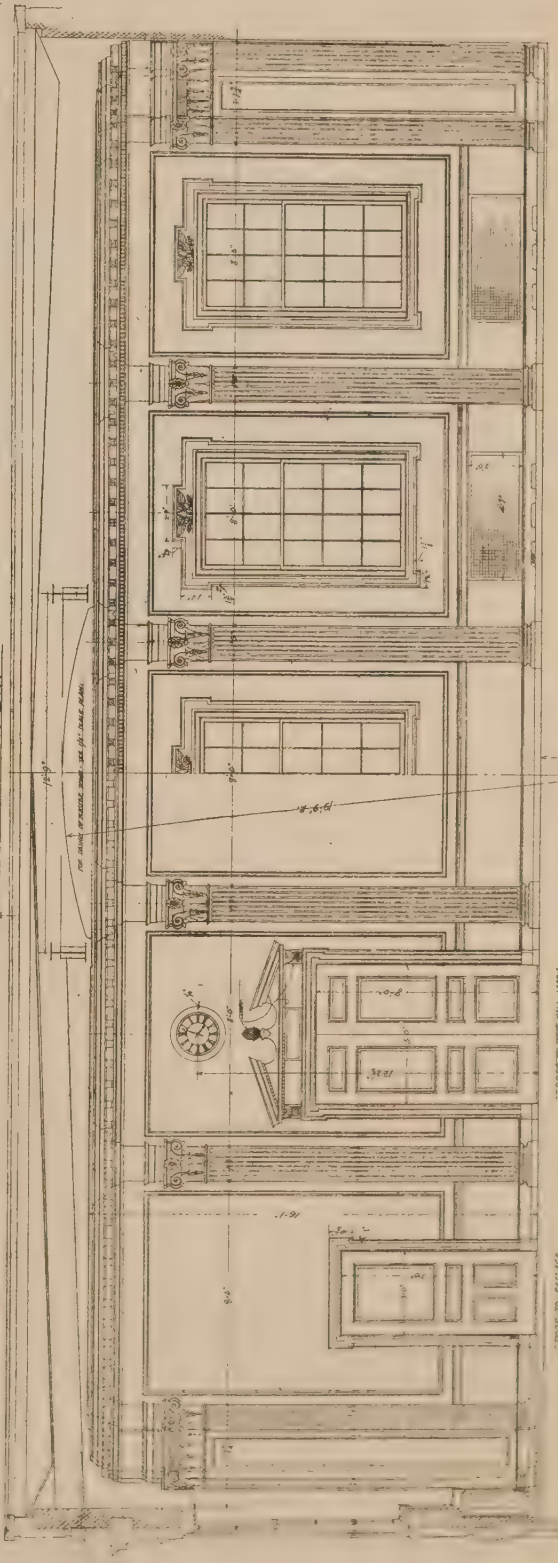
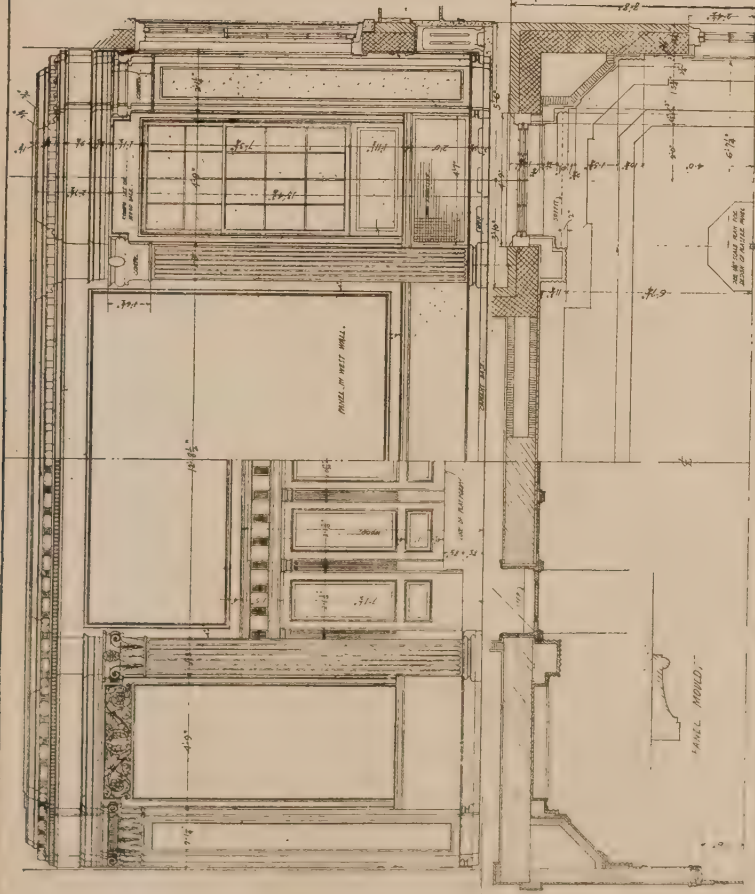
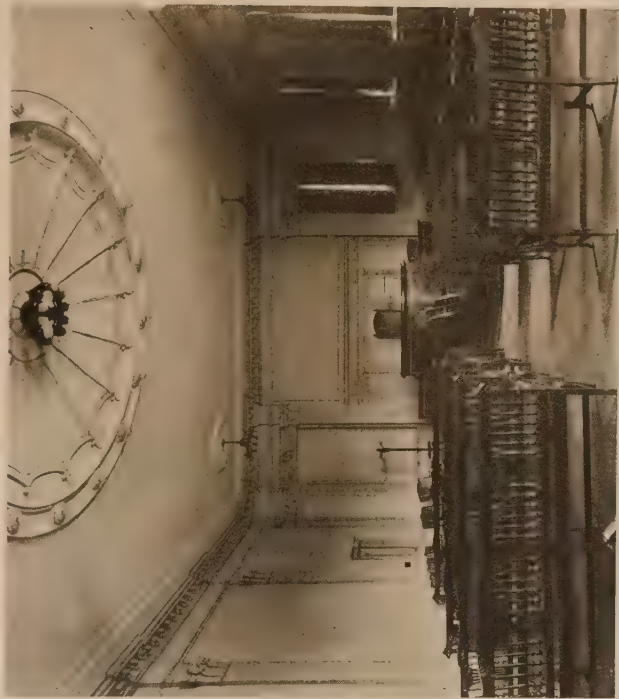




DETAIL OF ENTRANCE LOBBY AND MAIN STAIRWAY, TOWN HOUSE, HEMPSTEAD, LONG ISLAND, N. Y. Steward Wagner, Architect.







TOWN HALL, TOWN OF NEWCASTLE, D.  
DESIGNED BY J. H. STANTON, ESQ.  
CONSTRUCTION BY J. H. STANTON, ESQ.  
1919





# The New Hempstead Town House

Steward Wagner, Architect



Rear view, Town House, Hempstead, Long Island, N. Y.

THE new Hempstead Town House has an ancestry of historic interest closely intertwined with the history of our early colonial times.

The first town hall or "meeting-house" was originally established within the bounds of Hempstead by a white settlement in 1643, and was located inside the fort or stockade, where the settlers gathered for worship on Sundays and the annual town meetings were held for the transaction of public business. It was also used for the holding of the magistrate's court. The old town records show that the "town drummer" was paid twenty-five shillings a year for his service in beating the drum to call people to the meeting-house on Sabbath days for worship, and for the yearly town meeting. It is of interest to note in this connection that in this "meeting-house" took place the first provincial legislative assembly held in New York State. It was called together by Governor Richard Nicolls, and met February 28, 1665.

In 1680 the old fort and meeting-house were sold, and, a new meeting-house having been provided for by action of the town meeting, in 1678 a new building was built with town funds on the common land. This new structure was used for Christian worship and town business for the following fifty-six years.

During this period St. George's Church was organized, and after its new church building was completed, at a town meeting held November 1, 1774, it was voted to move the seats out of the old meeting-house into the new church building, the meeting-house thereafter being used exclusively for town purposes, and being used infrequently, it was neglected and was falling into decay. At a town meeting held December 27, 1742, a committee was appointed "to take care and charge of our old church or town house to secure it from any further damage," and as it was said that

several persons had "pulled and carried away a part of ye said house without order or authority," the committee were imposed to make inquiry and to prosecute such transgressors on behalf of the town.

The records show no further mention of the old structure, and at the close of the Revolutionary War a system prevailed of holding the town meeting "at the houses" of certain prominent men, mostly in the village of Hempstead, the place of the next meeting being decided by vote. This practice continued in force for the next three-quarters of a century. The meetings were appointed to be held seemingly after some system of rotation at one or other of three inns or taverns of the village.

This method was followed until the year 1874, and we may imagine that entertaining their townsmen on such occasions was not an unprofitable honor to "mine host," especially as the law and public opinion had not yet forbidden the open bar in public houses on election days.

In the year 1874 the town purchased from a patriotic society of women their building known as Washington Hall, which was used from that time on until 1920 as the town hall.

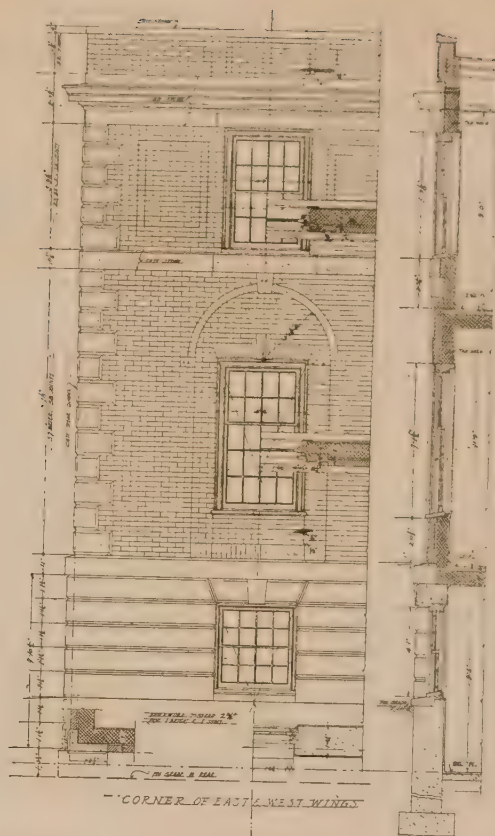
In the year 1918 the growth of the community and accumulation of records made imperative the consideration of new quarters, and a site was selected known as Harper Park, opposite the historic St. George's churchyard, the building approach being flanked by two giant button-ball trees, over two hundred years old, these forming a magnificent setting for the new structure.

A competition was held, and the plans submitted by the author were chosen, the plan being of a T-shape form, the design based on the early colonial, with a clock-tower in accord with the historic traditions of the town.

(Continued on page 364.)



CORNER OF WING.



DETAIL OF WING.



MAIN ENTRANCE.

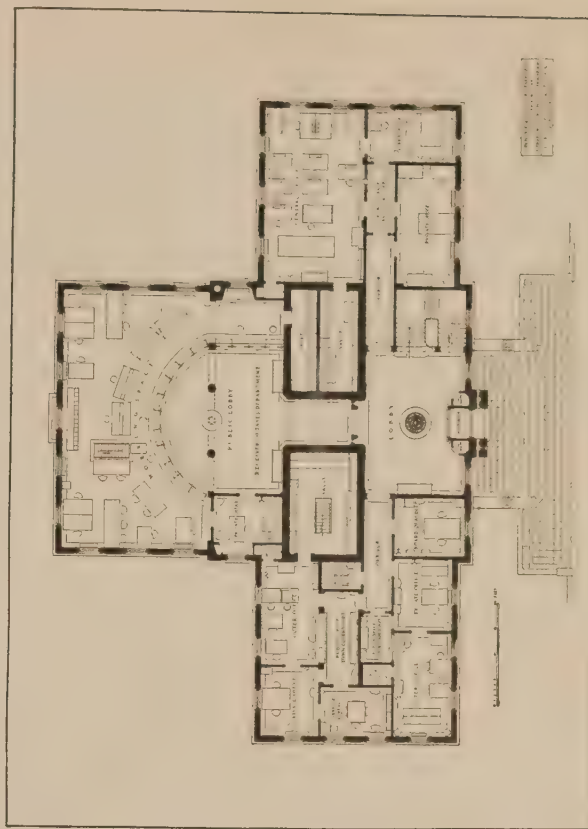
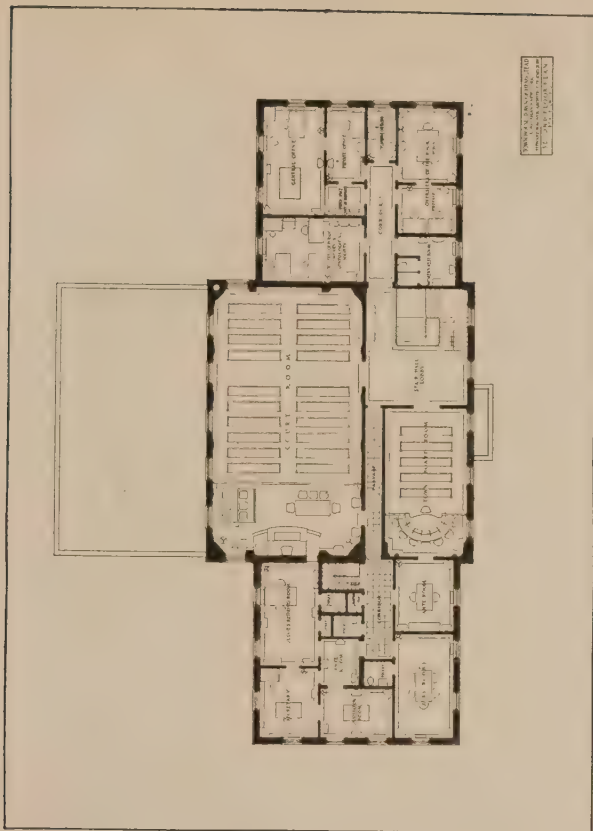


MAIN STAIR AND SECOND-STORY LOBBY.

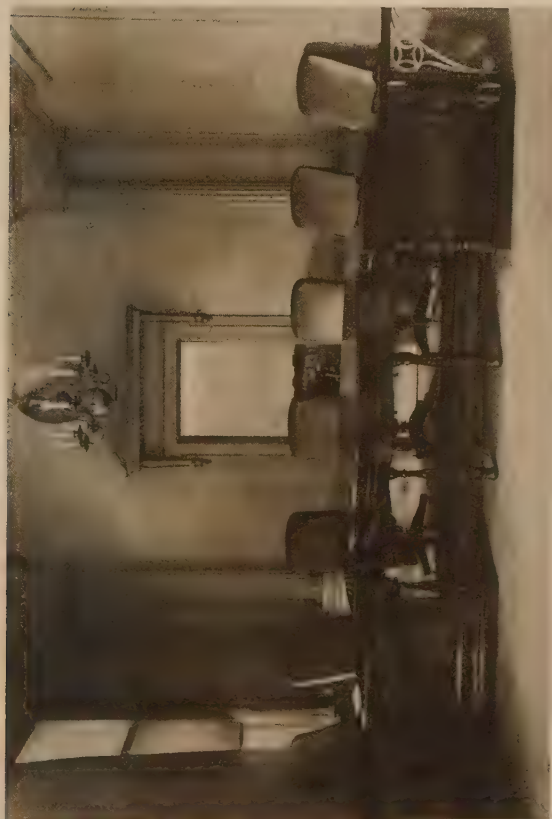
TOWN HOUSE, HEMPSTEAD, LONG ISLAND, N. Y.

Steward Wagner, Architect.

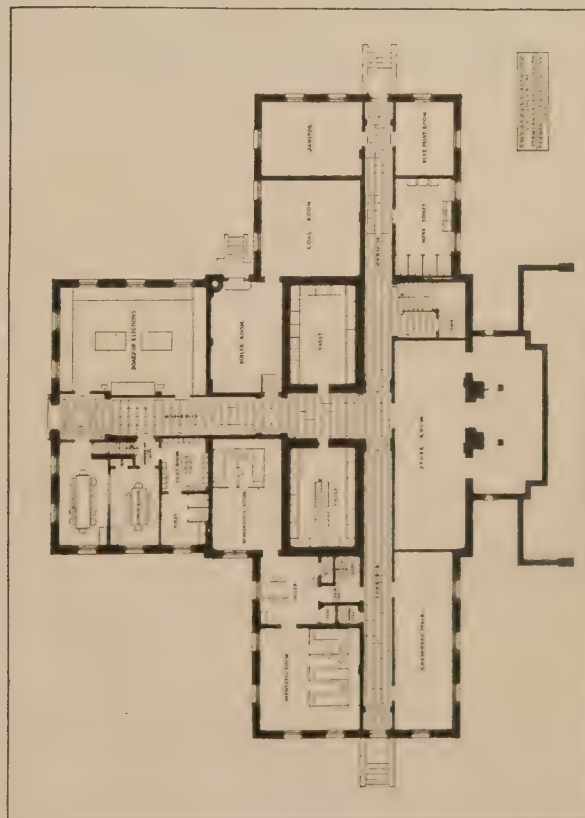




Steward Wagner, Architect.



BOARD ROOM.



TOWN HOUSE, HEMPSTEAD, LONG ISLAND, N. Y.

(Continued from page 361.)

It might be said here that in the past the planning and construction of a public building has generally been associated in the public mind with political intrigue, incompetency, and worse. In this instance, however, it is fair to state that the architect was not only unhampered in his efforts to produce a fitting structure, but received every encouragement and assistance from the various public officials directly in charge of the work, and their disinterested aid was a large factor in securing satisfactory results.

The contracts for the building construction were let in the early spring of 1918, at a time when prices were soaring to an unprecedented height, and as the expenditure was definitely limited to a very modest sum, unusual care had to be exercised in both the plan and choice of materials so as to keep within the fixed price limitations.

The building is two stories in height, exclusive of basement, with a tower rising to a height of seventy-five feet above the sidewalk level. This tower is equipped with a four-dial clock, which is illuminated at night, and furnished with chimes to toll the hour and half-hour, and for use on special occasions.

The plan is principally distinguished by its compactness and its ability to conveniently handle all public business and the correlation of the various departmental offices. The colonial motive has been carried throughout the interior design, including furnishings which have been specially designed by the architect to secure useful and harmonious equipment.

The main entrance on Front Street opens on a spacious public lobby, from which are directly accessible the departments of the Receiver of Taxes, Town Clerk, and Board of Assessors. The plan avoids all long or dark corridors, and is arranged to avoid at all times any possibility of crowding or congestion.

Adjacent to the public lobby a separate stair lobby is provided which gives access to the second floor, on which are located the court and town board room, which are equipped with the necessary conveniences in the way of judge's chambers, retiring rooms, private stairway for conveyance of prisoners between the cell-rooms and the courtroom, the prisoners' quarters being located in the basement, the grouping of all rooms permitting ready intercommunication with complete privacy. On this floor are also located the various minor town offices, such as the Superintendent of Highways and Overseer of the Poor. Special and complete vault accommodations have been provided for the convenient and safe storage of all town records.

A heating-plant is provided in the basement, which also contains rooms required for the convenience of the employees, janitor's office, and similar activities. The exterior of the building is constructed of red brick with stone trimming, with all floors and partitions of fireproof materials.

Special acknowledgment is made to Mr. John D. Fish, of Hempstead, New York, for the historical data contained in this article.

## Construction of the Small House

By H. Vandervoort Walsh

Instructor in Architecture, School of Architecture of Columbia University

### ARTICLE IV

#### ESSENTIAL STANDARDS OF QUALITY IN BUILDING MATERIALS

##### CEMENTING MATERIALS

**T**HE most important cementing materials which enter into the construction of the small house are lime, cement, gypsum, and their various mixtures, as mortar, plaster, and concrete.

The various technical requirements for good lime and cement are very strict and detailed, and for the small house it is customary to cover their qualities in the briefest manner by referring to the standard specifications of the American Society for Testing Materials.

Slaked lime should be made from well-burned quicklime, free from ashes, clinker, and other foreign materials.

Dry hydrated lime should be the finely divided product resulting from mechanically slaking pure quicklime at the place of manufacture.

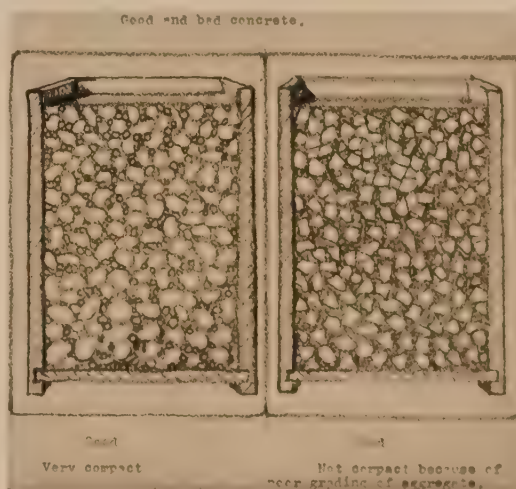
The specifications of the American Society for Testing Materials covering the quality of cement should be followed where large purchases are made. Where small quantities are to be used, the reliability of the dealer must be the basis of purchase.

As mortars and concretes made from these materials are as important as the cements or limes, it is essential to have definite standards for them.

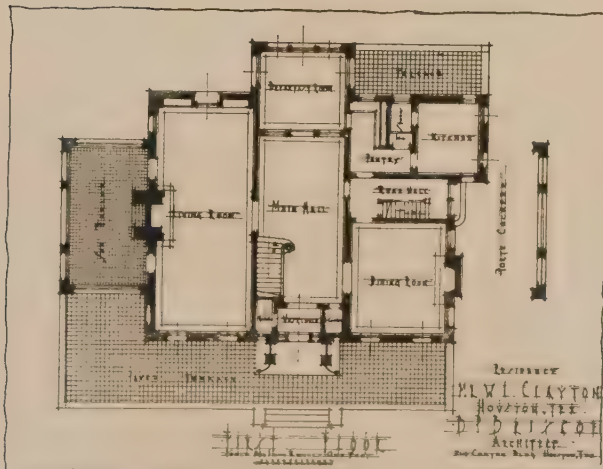
Lime mortar should be made of 1 part by volume of slaked-lime putty or dry hydrated lime and not more than

4 parts by volume of sand. The use of hydrated lime is recommended, since the poor qualities which are apt to develop from careless slaking of quicklime are thus avoided. It also comes in smaller packages, and if the entire quantity

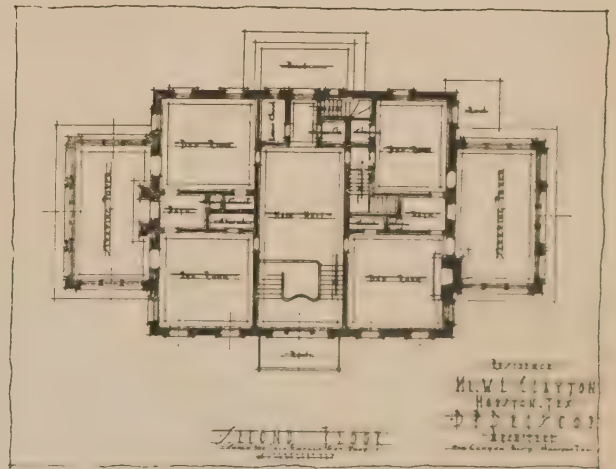
(Continued on page 366.)







HOUSE AND PLANS, W. L. CLAYTON, HOUSTON, TEX.



B. P. Briscoe, Architect.



(Continued from page 364.)

is not used at once it may be stored without deterioration. It is only necessary to mix the hydrated lime with water until it becomes a paste, and then add the necessary sand. The purpose of adding sand is to increase the bulk and to reduce the shrinkage which pure lime paste will develop as it hardens. Pure lime paste, without sand, will shrink, crack, and develop very little strength. By introducing sand this contraction is reduced, but the addition of too much will decrease the strength slightly. However, this decrease of strength is very little. A mortar made of 1 part lime to 6 parts sand is nearly as strong as one made from 1 part lime and 3 parts sand. The maximum amount of sand to be used is generally governed by the ease of working, and not so much by the strength. A lime which is too sandy will not spread easily on the trowel.

*Cement mortar* is, of course, a stronger material and can be used in damp places where lime mortar would deteriorate. The theory of mixtures of both cement mortar and concrete is to proportion the materials so that they produce the most compact substance. For instance, in the cement mortar the cement should just fill the voids between the particles of sand, and in concrete this cement mortar should just fill the voids in between the larger aggregate, and this larger aggregate should be so graded in size that it makes the most compact body. It used to be thought that certain definite numerical proportions, as laid down by theory, of the various ingredients would hold true for all kinds of sands and aggregates. For instance, the proportion of 1 part of cement, 3 parts of sand, and 6 parts of aggregate was thought to be the best for ordinary use under all conditions. But extensive tests by the government have shown that the only real way to determine the correct proportions of mixtures is to experiment with the particular sand and gravel that will be used, and to test them to see what ratios give the most compact mass. It has also been shown that round aggregate, like pebbles, produce the strongest concrete, since the particles flow into place better than the sharper aggregates, which formerly were considered necessary because of the supposed idea that they made a better mechanical bond with one another. The proportion of water is also important, and it is found that a quaking mixture will produce the best results.

It is customary in small work, however, where no experiments can be made on various mixtures to determine their proper proportions, to follow the old rules of thumb for amounts.

Cement mortar should be made of cement and sand in the proportions of 1 part of cement and not more than 3 parts of sand by volume.

If cement-lime mortar is to be used it should not have more than 15 per cent by volume of the cement replaced by an equal volume of dry hydrated lime. The addition of hydrated lime to cement mortar improves its working qualities, making it slide more readily on the trowel and also increasing its waterproofness. Its strength is not decreased within the limits prescribed.

In concrete work it is as important to have good sand and aggregate as cement. Sand should be sharp, clean, coarse quartz. The sand used should not when it is rubbed in the hand leave the palm stained.

Gravel which is used as an aggregate should be free from clay or loam, except such as naturally adheres to the particles. If there is too much clay or loam, it should be washed with water. When bank gravel is used the best results will be obtained if it is screened from the sand and remixed in the proper proportions for fine and coarse aggregate. For

ordinary mass concrete the size of aggregate should vary from  $\frac{1}{4}$  inch to 2 inches, and in reinforced work should not exceed  $1\frac{1}{4}$  inches.

The best proportion of parts to use must vary according to the requirements, but for the small house good results will be obtained by using 1 part of cement, 2 parts of sand, and 4 parts of gravel or broken stone.

Stucco is really a Portland-cement plaster used on the exterior, and its success depends a great deal upon the quality of materials employed and workmanship. All stucco to a greater or less degree cracks, but the problem is to make the cracks as small as possible. The government is carrying on an extensive investigation of the problem of stucco through experiments on fifty-six exterior panels which have been under observation since 1915. Each one of these panels has been spread upon a different base or made with different proportions. So far only two panels have been found to be entirely free from cracks, although many are practically uninjured by the small cracks which have developed. It is therefore quite evident that as a rule it must be assumed that the stucco will crack to a certain extent, and in order to cover such defects a rough surface is the best. As to proportions of mixtures, there is a great variation of opinion. The commonest is 1 part of cement,  $2\frac{1}{2}$  parts of sand, to which is added about  $\frac{1}{10}$  part of hydrated lime by weight of cement. For a more detailed account on stucco, send for the Progress Report issued by the Bureau of Standards on the Durability of Stucco and Plaster Construction.

The qualities of internal plaster depend upon the construction of the wall, the methods of application of the plaster, and the quality of the plastering material.

The walls and ceiling to which plaster is to be applied must be so constructed as to be practically rigid under the loads that they will carry. Since plaster is not elastic, any slight change in shape of the surface will cause it to crack. The common backings which are satisfactory for plastering are wood lath, metal lath, and masonry, such as concrete, terra-cotta tile, brick, plaster board, etc. Wood lath makes the least rigid back of all, and for this reason is not considered the best, although it is the cheapest. Unless the wood laths are wet before the plaster is applied, they will absorb the moisture from the plaster and swell, thus cracking the wall. Metal lath for this reason is superior. Masonry walls should be made rough to give the necessary key for the plaster to cling to. In brick walls the joints are raked out, in concrete walls the surface is picked, and the outside of terra-cotta tile is marked with grooves for this purpose.

The best results in plaster are secured with three coats. The first coat is called the scratch coat, and is intended to form a bond between the wall itself and the plaster. It should be pressed into the apertures between the lath to secure a good bonding key, and its surface should be scratched with a tool to give the required bond between it and the next coat, or brown coat. The brown coat forms the main body of the plaster and averages about  $\frac{3}{4}$  inch to  $\frac{7}{8}$  inch thick. The finished coat is then added on top of this and is intended to develop a plane surface with the desired color. Each coat should be allowed to dry out and then be wet before the next one is added. If wood lath is used, this drying and wetting will cause the lath to shrink and swell, so that cracks will be developed in the scratch and brown coats. These should be filled in before the finished coat is added.

The materials which should be used in the various coats depend upon the requirements which are necessary for each one. As the most important characteristic of the scratch



coat is strength, and that of the brown plasticity, and the final coat appearance, the materials must be proportioned accordingly.

SCRATCH COAT PROPORTIONS

Hydrated lime.....	133 parts.
Sand.....	400 "
Hair.....	1 part

BROWN COAT

Hydrated lime.....	100 parts.
Sand.....	400 "
Hair.....	½ part

FINISHED COAT

Smooth Finish

1 part by volume of calcined gypsum.  
3 parts " lime paste.

METALS

The most used metal in the small house is the so-called tin-plate or roofing tin. It is not a true tin-plate, for it contains 75 per cent lead and 25 per cent tin applied to a base of soft steel or wrought iron. It comes in two grades, IX



and IC, the former being No. 27 gauge and the latter No. 29 gauge. The heavier is used for roofing and the lighter for valleys and gutters. The tin does not entirely protect the base metal, so it is necessary to paint both sides before it is applied.

Galvanized iron is another form of sheet metal which is extensively used for work on the small house. It consists of sheet iron or steel covered with zinc. The coating should be free from pinholes or bare spots and of a thickness to

prevent cracking or peeling. If the coating is sufficient and well done, it is superior in lasting quality to the ordinary tin-plate.

As iron and steel enter very little into the construction of the small house, we will not discuss them in this limited space.

PAINTS

No material is so dependent for its qualities upon the honesty of the manufacturer as paint. No material needs to resist such a large number of factors which tend to destroy it. A good paint must have substantial thickness upon application, adhere well to the surface to which it is applied and protect it. It must resist the expansion and contraction of the underlying surface, the abrasion and wear from sand, dust, rain, and sleet, the absorbing action of the sun, and the contraction of the cold in winter. It must dry with sufficient rapidity when applied and must have good covering power.

The following is one of the accepted formulas for a good white-lead paint for outside use.

To the following base, add the materials given in the table:

Base

15.5 white-lead paste.  
3 pints of raw linseed-oil.  
5 ounces of turpentine and Japan drier.

Add to the above base the following for each one of the coats specified:

MATERIAL	FIRST COAT		SECOND COAT	THIRD COAT
	Basswood	Yellow pine, cypress		
Raw linseed-oil...	¼ pint	¼ pint	.....	1½ pints
Turpentine.....	1½ pints	1½ pints	1 pint	.....
Japan drier.....	.....	1 ounce	.....	.....
Benzol .....	.....	⅔ pint	.....	.....

GLASS

There are two kinds of window-glass used, double thick and single thick. The former is ⅛-inch thick and less, and the latter is ¼-inch thick. It is customary to use double thick in all window-panes over 24 inches in size. The grading is AA, A, and B, according to the presence of defects, such as blisters, sulphur stains, smoke stains, and stringy marks.

Plate glass is used only where the expense will permit. It is different from window-glass in that the former is made from blown glass, while this is made from grinding and polishing down sheets of rolled glass.

There are quite a number of other minor materials which enter into the construction of the small house, but as they are more or less identified with the mechanical equipment and the finishing, we will discuss them under these headings.

Twenty States were represented at a meeting of the National Council of Architectural Registration Boards held in St. Louis on November 18 and 19.

Two resolutions of interest to engineers were passed. One expressed the sentiment of the meeting that registration laws should permit the issuance of certificates to alien architects. Another was that joint registration laws for architects and engineers are undesirable.

The meeting evidently did not favor compelling the

public to employ a registered architect, but rather took the position of protecting the name "architect" and then educating the public that the right to use the title was evidence of competency. The basis of registration was declared to be service to the public.

Superintendent of Registration Dodds, of Illinois, outlined the elements of a successful registration law based upon his experience administering laws in Illinois regulating many professions and trades.

# New Houses for Old

By B. H. & C. N. Whinston, Architects



Remodelled shops and apartments corner Broadway and 80th Street, New York. B. H. & C. N. Whinston, Architects.

THE Calvin Apartments are an example of what may be accomplished with a comparatively small outlay and the use of novel ideas in planning and arrangement.

The northwest corner of Broadway and 80th Street, New York City, some fifteen months ago presented an appearance of dilapidation entirely inconsistent with the neighborhood and the possibilities of the corner. The seven old buildings which occupied the corner were erected some fifty or sixty years ago and had long outlived their usefulness. In fact, no one in the neighborhood, down to the oldest inhabitants, could tell with certainty just when they were erected.

The four tenements on Broadway, with the inevitable saloon on the corner, housed the poorest class of tenants. The total rental revenues of the property amounted to about twenty thousand dollars per year. The apartments, of the old dead-centre type, brought about fifteen dollars per month, there being two per floor and sixteen in all. With

the need for increased revenue, the owner was confronted with the problem of improving the property at a minimum of expense, and the architects were intrusted with the entire proposition. The ultimate result shows that they were given full swing of the project, and their treatment of the problem has resulted in a pleasing, practical, and profitable arrangement.

The houses were thrown together to form an harmonious whole, the stairways removed, and new ones introduced

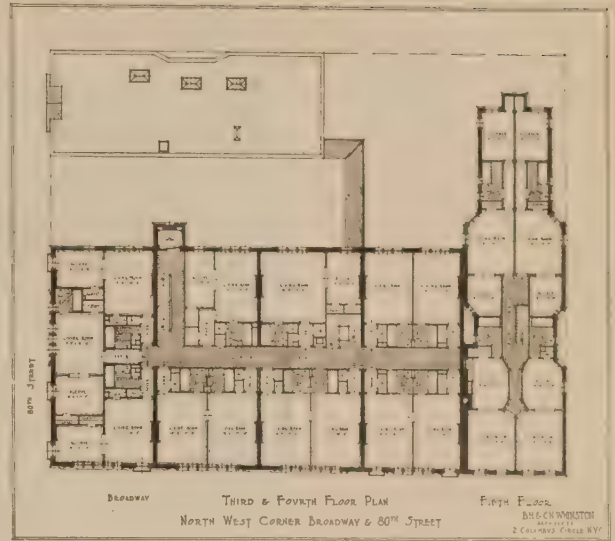
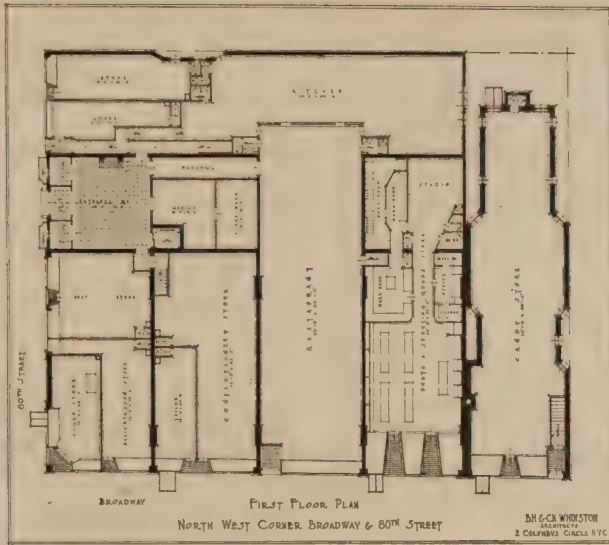
in logical locations. The floors were divided into suites of one, two, and three rooms with foyers, baths, and closets. The best quality of plumbing equipment was provided, and the finish of the building throughout was made new, with parquet floors, stippled walls, new doors and trim, and so on, down to the last detail. The four corner houses, which contained sixteen apartments originally, were increased in height by the addition of one entire



Old buildings before alteration.

(Continued on page 370.)

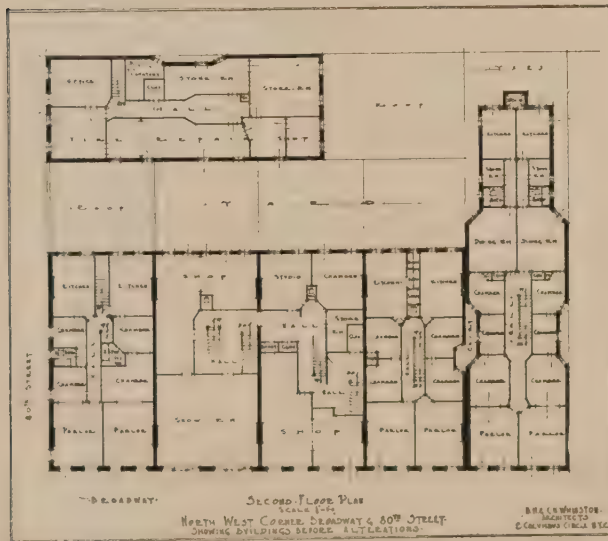




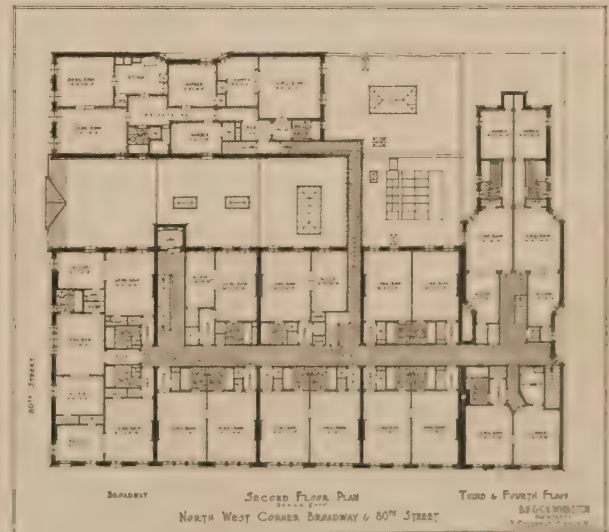
ENTRANCE-HALL ON WEST 80TH STREET.



A TWO-ROOM APARTMENT.



BEFORE ALTERATION.



AFTER ALTERATION.

CALVIN APARTMENTS (REMODELLED).

(Continued from page 368.)

new floor and divided into thirty-nine apartments, with fifteen additional apartments in the northerly extension.

An elevator was installed, which connects the entrance-hall with the upper portion of the building.

The old one-story building on the street suggested the proper motive for an entrance, and the entrance-hall was developed in full conformity with the interior English effect.

The ceiling was beamed in old oak, with stippled plaster between. The walls are of caen stone, tooled with six cuts to the inch and deeply cut joints left open. The floor is of dull faience and quarry tile, with Tennessee marble base. The ornamental trim at all doors and openings is of cast caen stone. The radiators are concealed behind bronze grilles between the vestibule and the adjoining alcoves. These alcoves have



Main entrance to Calvin apartments on West 80th Street.

built-in oak settees and are lighted by wall-brackets, the whole forming a most inviting entrance.

The two-story garage at the westerly end of the property provided an excellent five-room and two-room apartment above, with two baths and one bath respectively, as well as two stores and service entrance to restaurant below.

The total cost of the work was \$150,000, and the ultimate rental value of the property is now over \$120,000 per year, an increase of over \$100,000 per year! This latter sum is, of course, not realized by the owner, but by the operating

company who took over the property.

That the development enhanced the neighborhood can be seen by comparing the character of the shops on the old premises with those on the new.

## Announcements

Jobson and Hubbard, architects, wish to announce they have moved their offices from the Pullman Building to 225 North Michigan Avenue, Chicago.

Weller H. Noyes announces the removal of his office from 800 First Avenue to Suite 602, Transit Building, No. 7 East 42d Street, New York City.

Messrs. Hewitt and Ash, architects, have moved their offices from No. 520 Walnut Street to No. 1827 Arch Street, Philadelphia.

John F. Suppes desires to announce the opening of an office for the general practice of architecture at the Firestone Park Bank Building, 1115 South Main Street, Akron, Ohio.

We regret to announce the recent death of Mr. E. W. Hart, architect, of the firm of Hart & Barrett, East Las Vegas, N. M. Mr. Hart was well known and had practised his profession for eighteen years in Columbus, Ohio, before going to Las Vegas for his health. Mr. Barrett will continue the office at its present location, Suite 11, Crockett Building, East Las Vegas, N. M.

The firm of J. C. Berry & Co., architects, composed of J. C. Berry and E. F. Rittenberry, have taken into partnership Mr. M. C. Parker of Fort Worth, Texas. Mr. Parker will move his office to Amarillo and be connected with this firm after November 1. The new firm will be styled Berry, Parker & Rittenberry, Architects, with offices in the present location, Suite 29, 30, 31, Fuqua Building, Amarillo, Texas. J. C. Berry and E. F. Rittenberry will complete all their old contracts and assume all obligations of the old firm.

**MACRAE'S BLUE BOOK.**—Thoroughly indexed, substantially bound, of convenient size and weight. All names *live*. More than 50,000 of America's keenest buyers rely upon MacRae's Blue Book for their buying information. It contains: Arranged in alphabetical order, the names and addresses of 35,000 of America's leading manufacturers,

showing in thousands of cases, location of branch offices. Indexed under 14,000 classifications of material, and supplies the names and addresses of these 35,000 manufacturers with brief selling talks on the merits of the advertisers' products. An alphabetical index of trade names of materials and the names and addresses of the manufacturers thereof. Miscellaneous data, such as weights, measures, and tables, gleaned from a thousand sources, and so unique and valuable that in the physical valuation of railroads, where almost every form of material and equipment must be considered, it has been used very extensively. Manufacturers are scattered from coast to coast, from boundary to boundary. MacRae's Blue Book gives you a bird's-eye view of the entire industrial field. It enables you to get in touch with manufacturers and dealers of whom you have never heard before. Letters can be sent north, east, south, and west, stating your needs.

Prizes for the best work in beautifying Fifth Avenue during the year have been awarded as follows:

Gold medal for best new building, 24 West Fifty-seventh Street Company, for their new building erected at 24 West Fifty-seventh Street, Buchman & Kahn, architects.

Silver medal for second best new building, Douglas L. Elliman & Co., Inc., for their new building erected at 15 East Forty-ninth Street, Cross & Cross, architects.

Gold medal for best altered building, Guaranty Trust Company, of New York, at 522 Fifth Avenue, Cross & Cross, architects.

Silver medal for second best altered building, Edward I. Farmer, at 15 East Fifty-sixth Street, Trowbridge & Ackerman, architects, Lawrence Barnard, associate architect.

Mr. James C. Mackenzie, Jr., architect, formerly located at 15 East 40th Street, announces the removal of his office to 4 East 39th Street, New York City.

Croft and Boerner, architects and engineers, announce their removal to 1006 Marquette Avenue, Minneapolis, Minn.



# The Building Situation in Argentina

Photographs by "La Nacion," Buenos Aires

THERE is a large field for the sale of American construction materials in Argentina. Buenos Aires is in great need of first-class office-buildings. Modern hotels and apartment-houses of the American type are needed and many model homes for working men will soon be erected in the suburbs. Notices appear in the newspapers of the capital

from time to time inviting bids on various public construction enterprises.

The National Council of Education has adopted a large building programme for public schools, and the plans to be completed in the next few years call for an expenditure of about \$8,500,000. The needs of various cities in the Province of Buenos Aires will call for the installation of sewerage and water systems, in the near future, at a total cost of \$2,300,000.

The various provinces of Argentina

have building programmes independent of those of the central government, but also receive federal aid in the execution of many public works.

Argentina has always been an excellent market for iron and steel products for construction purposes. Formerly the imports of cement were considerable, but a large cement plant is now in operation about two hundred miles from Buenos Aires, owned by American interests. Lime of unsurpassed quality is found in many parts of Argentina, and the plaster of Paris used is produced chiefly in the country. Clay roofing tiles and roofing slate, and glazed wall and vitrified floor tiles, are imported in considerable quantities.

In the past ten years many skeleton-steel structures have been erected.

The lack of ocean transport tonnage for bringing in construction materials, machinery, etc., the high costs of such materials, of fuel, lubricants, etc., increased ocean freight rates, a lack of investing capital, and the higher wages of labor with a shorter working day—all of these greatly diminished construction operations of either a public or a private nature in 1918. An immediate result of the decrease in the erection of office and apartment buildings has been an abnormal increase in rentals of all sorts, and without regard to localities.

None of the older cities of South America has so completely lost its national characteristics as Buenos Aires, and, while the greater number of houses are constructed after the old Spanish style of one or two stories built around a

"patio" or inner court, there are, nevertheless, many palatial mansions in the newer quarter of the city and in the business district designed after Parisian, Italian, Moorish, and Norwegian patterns.

On account of the scarcity of lumber, wooden houses are seldom seen. The smaller one, two, and three story houses are made of a hand-made native brick, and are faced with cement. The larger and more expensive buildings, such as apartment-houses and office-buildings, are constructed with steel frames and reinforced cement, with brick walls and hollow brick for partitions. Very little stone or granite is used, although in certain parts of the country there are large deposits yet to be quarried. The great difficulty is transportation, since freight rates are very high for either brick or stone.

Only a few years ago the greater part of the houses in Buenos Aires had only a ground floor, hence the impression which struck the European traveller on arriving at the Argentine capital was of a decapitated town, extending over vast space, and extremely flat. But in these last years an infinite number of buildings have been constructed, scattered over all the town, with very grand proportions and, for the most part, of the Italian Renaissance style.

The municipal programme for 1920 considered the increase of the area of public parks in the city of Buenos Aires by fifty-one acres, and the carrying out of previous ideas of diagonal boulevards crossing the city. Comparisons were made with European cities and presented before the municipal authorities to show that Buenos Aires was not devoting enough space to the use of parks and avenues. Although this city covers an area two and a half times as great as Paris, it contains less than half as much park and open space. Comparisons with London, Vienna, and Berlin were also unfavorable.

Buenos Aires is one of the fastest-growing cities of the world. The census of 1914 showed 1,575,800 inhabitants, and it is now estimated to be over 2,000,000, since immigrants are arriving at the rate of more than 10,000 per week. Until recently the city has retained most of the characteristics of the small Latin American city. The one-story massive stucco house with interior patio has been the

(Continued on page 374.)



Faculty of philosophy and literature.



Paseo Colon (Columbus Square).



HOUSE OF CONGRESS. (The representatives of the nation have met here since May, 1906. The building is Greco-Roman style and resembles the capitol at Washington. The plans for the building were drawn by Mr. Victor Meano. The cupola weighs 30,000 tons).



CASA DE EXPOSITOS (Government Building for the care of natural children).



LA MORGUE. (The Morgue of the medical profession, where students have the opportunity to dissect and study the human body. The building belongs to the Institute of Legal Medicine.)



ESCUELA PRESIDENTE ROCA (Primary School of President Roca).





COLEGIO NACIONAL (Mariono Moreno High School).



BOLSA DE COMERCIO (the Exchange).



NUEVO BANCO ITALIANO (New Italian Bank).



PLAZA HOTEL. (Fourteen-story building as a specimen of the national progress rather than as a money-making undertaking).



**COLON THEATRE.** (The exterior of the building shows three different styles of decoration: the first floor in the Ionic style; the second Corinthian; and the third Attic, inclining toward the Corinthian. The height of the façades, from the ground up to the cornice, is 24.70 metres. The playhouse is one of the largest in the world. Its total length from one of the balconies is 75 metres, three metres longer than that of San Carlo in Naples. The dimensions of the ground floor are 27.8 metres by 22.50 metres. It contains 900 fauteuils placed on seven grades. The hall can hold 3,750 spectators. The front of the stage is 18 metres broad by 19.25 metres high. The interior vertical dimension of the stage is 48 metres from the foundations up to the arch. The theatre is constructed with incombustible materials.)



**GOVERNMENT PALACE.** (The building is constructed with bricks on a piece of ground that forms a parallelogram. The façades cut at right angles and measure 125 metres by 81 metres. The building has on its highest part a group of gigantic statues, made by the sculptor Bianchi).

prevailing type, and the streets, with the exception of a few avenues, are narrow. A city ordinance now requires that new buildings must be constructed to a given line in order to widen the thoroughfares, while the big increase in land values is automatically taking care of the increase in the height of buildings, which are invariably being built of two or three stories.

A resolution was adopted also for city supervision of all buildings to be erected on the diagonal avenues in order

to insure proper embellishment of the city. It was originally intended that these avenues should radiate from the Plaza de Mayo, but the scheme was abandoned because of the great cost of acquiring the property and constructing the boulevards. However, the administration favored taking up the plan again. The razing of so many houses along the line of the boulevards would necessarily aggravate the present situation of rent scarcity, but it is felt that this temporary disadvantage would be more than compensated for by the building of two, three, and four story houses along the way. If the ideas of the administration and city engineers are carried out, a building boom will soon be inaugurated in Buenos Aires with an accompanying need for large imports of building materials.

## Home Ownership on a Pay Envelope

(Continued from page 355.)

plant, coal storage, and a small laundry. In connection with the laundry, there is a suggestion that might be made, that in place of the sink a combination sink be installed or laundry tray be placed along the side of the sink, over which the drain-board would fit, and the regulation kitchen-sink installed. Many people believe that one laundry tray would be sufficient in a house of this size, especially if there is a good hot-water supply. In this way, it goes without saying, the expense would be less.

I believe if the architects generally would take up this matter of trying to interest groups of approximately twenty-six people, and sufficiently investigate prices of property, that the result would be better architecture for the small, inexpensive houses. They must bear in mind that they have got to eliminate a great many of the refinements that one's natural tendency leads him into with the resultant higher cost, and it is just this small additional extra amount per house that usually turns the prospective client from the architect to the speculative builder.

To say that a project of this kind is unprofessional is, to my mind, beside the point, since results are what count, and if the architects could see their way clear to this development idea, there is no question but that the small-house architecture of the entire country would be greatly improved

in a very short time, for, as we know, in plan and elevation, the houses would be so far superior to the speculative builder's type that the public would very quickly recognize it. Therefore, as mentioned above, it is only necessary for the architect to hold down on special mouldings, which boost the price, and be content with a simple, well-proportioned building for the first few developments.

By this first sacrifice, the public will soon appreciate the superiority of these buildings, and then in later developments the architect can undoubtedly prove to his group of clients that a few dollars more will give them infinitely better houses from the standpoint of design and, consequently, more livable, *i. e.*, the owners will soon realize that each year they become more and more fond of their houses instead of each year desiring a change to be made because of lack of real design.

Any group of professional or business women—or in fact, young married couples—who are interested in the outlined project as given, may obtain full information concerning it from Miss Blanche Geary, of the Building and Construction Bureau of the National Board of the Young Women's Christian Association, 500 Lexington Avenue, New York City. Miss Geary, under whose direct guidance floor plans for many million dollars' worth of association buildings have been developed, spends almost her entire time in visiting individuals and communities in the interest of this housing programme of the association.



# Town Planning for Convenience and Health

By Louis Lott

## PART III

### LOCAL PROBLEMS

CHART V will show, in a general way, such local problems that are common to most communities, and that must be met and studied in relation to each other in the comprehensive plan. They are approximately as follows:

*A regional plan*, which must solve questions common to a given region. In some cases, such questions will involve territory extending far beyond a community's limits and are such as highways, railroads, sewage disposal, water-supply, flood prevention, source of energy from water-power or such as is more recently generated directly at some coal-mines, and which does away with coal transportation.

*Railroad plan.* This is one of the first items in a comprehensive plan that must be carefully analyzed and solved, since the common carriers are the most important factors

*River or canal problems* that need solution, in the way of correcting their course, or turning the river frontage over for public use and enjoyment, by providing river parks and boulevards, bathing-beaches, landscaping, or by providing docks and railroad yards, or there may be flood-prevention measures that must be undertaken, etc.

Comprehensive sewer and underground service line plans are needed by almost every community, such as for heat, light, water, power current, etc.

A plan of public utilities, some of which are owned by nearly every community, such as surface and underground transportation lines, gas and water works, abattoir and public markets, etc. The latter should, especially in larger communities, be distributed over the community in the same manner as are neighborhood centres.

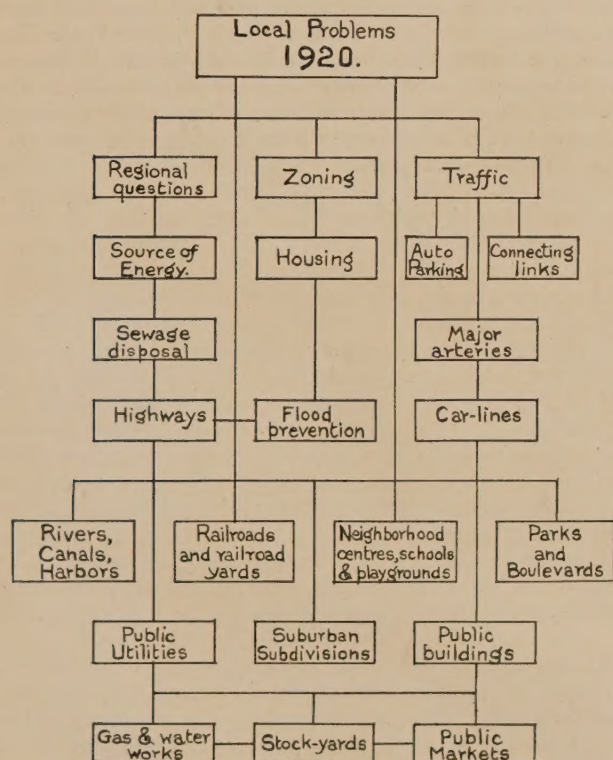
Neighborhood centres, playgrounds, and school problems are common to every community, and should be distributed in a scientific manner upon the basis of future density of population before desirable areas and locations are used for residence or other costly improvements. Moreover, the proper solution of this problem is that, if possible, all three be combined in one group, the schools so planned as to serve as neighborhood centres and the public playgrounds used in connection with the schools. In this way, maximum intensive use and economy referred to in Chart III can be had.

Furthermore, there are play fields, parks, and boulevards that every community should have, and the areas for which must also be reserved before they are developed for private use, etc.

But perhaps the most important question that confronts every community to-day, and the one which will have the greatest bearing upon the community of to-morrow, is the subdivision of the countryside immediately surrounding a city into "suburban subdivisions," or plats; for be it remembered that not so very many years ago 34th Street lay within a suburb of New York City, and Central Park out in the country, and that, furthermore, until very recently the present apartment-house districts of many of our newer and fast-growing cities lay out in the country, where Brer Fox and Brer Rabbit bid each other good night, and it is upon such land that the greatest opportunity for present-day constructive town planning lies.

In the past landowners and real-estate speculators have subdivided and put upon the market such patches of land that they controlled, a patch here and another there, and according to their various views and policies. One developed his holdings with the idea of making it a high-class development; another near by, maybe, playing upon the human weakness of wanting to be next to the sun, made his development of smaller and more popular priced lots; possibly another did the same thing; eventually the original development deteriorated into a spot of "has-been" glory to such an extent that the properties are put up for sale at only a fraction of their original cost, and those

CHART V.



in a community's existence. Therefore, ample provision should be made for future expansion of their rights of way, passenger-stations, freight depots and yards, but at the same time the community's interests must be guarded, which may require rerouting of lines in order to prevent blighted districts, or it may be a question of grade crossings, etc.



who can, move out to a new subdivision, where the whole process is perhaps started all over again. At all events, there was no co-ordination, and little protection was given to the home-builder in such a method of platting, and fabulous sums have been lost to the nation in this manner.

Furthermore, practically all communities have allowed large parts of their suburban districts to be ruined by accepting plat after plat that was rarely planned with any provision for open spaces, or for major arteries, or boulevards and parks, or beauty of any sort, and, with few exceptions, all laid out in a senseless, dreary, dry, hopeless manner of straight streets and minimum-sized lots; just plats with straight lines drawn upon them regardless of the topography of the land, and mostly with the sole idea of extracting as much profit as possible from the ground and with the philosophy of: "After us the deluge." In many instances such districts have been platted for miles around a community, with no probability of houses being erected upon them for perhaps thirty or more years to come. There they lie, decorating the countryside with their ribbons of sidewalks that will have gone into decay before being used, and growing weeds upon perfectly good farm land that should be used as such to produce food next to the source of consumption. Such procedure is nothing but economic madness and criminal waste, in that, when the land is finally built upon, the accumulated interest charges upon the original inflated purchase price of the lot plus the taxes, has produced a value that is all out of reason and is one of the factors for the high cost of living. Besides this, there are the losses to the community of the interest charges upon premature development and of food production in the intervening years of idleness. Such practice has been condemned time and again and cannot too often be repeated. The really disheartening factor about this is that after all the accumulated expenses have been piled up against such land, there is, in the end, nothing to show for it but the most ordinary, commonplace development that will be all out of harmony with the advanced demands of the time when it finally will be put in use, if at all, since in some cases such lots have actually been resold for farm land.

The remedy for all this is "comprehensive planning" of such territory, which, with the exercise of forethought and reasonable regulations, will make such depreciations impossible besides adding greater uniformity and beauty to such districts and at less cost of construction, and all without expense to the community other than the preparation of the comprehensive plan, which, besides stabilizing property values, will also reserve from private ownership for public use such land as is needed for school and playground sites, for play fields, parks, and boulevard, and for a comprehensive system of streets and major arteries of such forms and widths and in such locations that these will link up with the major arteries of the city and with the rural highways, and with each other in such a manner as to allow a swift, smooth, and direct flow of traffic which, under present conditions, where no such provisions have been made, is becoming more and more difficult because of the increasingly greater use of motor-cars and trucks, especially on Saturdays and holidays. This particularly applies to our larger and fast-growing communities such as Detroit. At present these communities allow property lines along their main traffic-bearing arteries, formerly rural highways, to be established upon a basis of width laid down in the early settlement days that to-day prove to be entirely inadequate to carry peak-load holiday traffic.

City plan commissions should, therefore, have the greatest power to regulate and guide subdivision platting upon a

comprehensive basis and to demand that major arteries be provided for, and that these be of ample width to take care of such peak-load traffic that they will ultimately be called upon to carry, and at a maximum speed compatible with safety and regardless of existing local ordinances pertaining to street widths. However, in most cases the full street width need not be taken over by the community until such time as it is actually needed. On the other hand, the roadways of second-class arteries, and especially of purely local residence streets, are, by city ordinance in most cases, of far greater width than will ever be needed, in that not a single vehicle traverses such streets for hours at a time and there never is a peak load. The same principle applies to sidewalks. Therefore, a revision of these antedated street-width ordinances and a more scientific planning that will determine them upon the basis of actual requirements will, in the aggregate, prove a considerable saving in construction and maintenance of roadways. This does not mean that local street widths between property lines should be reduced; on the contrary, the space saved in roadways should be added to the parking space between property line and curb, which, in all cases, will improve the looks of a street besides allowing more ground for shade-trees, thereby removing these farther from the house fronts and allowing more air and sunlight, the greatest enemies of germs, to penetrate the houses.

However, a satisfactory solution of an efficient suburban street system cannot be accomplished by strictly following, in all cases, the property lines established by the original land grants and their subdivisions. Examine the map of any community and it will be found that the suburban street system is very much like a picture puzzle, because the streets have followed the crooks and breaks of the boundary-lines of the land, and the puzzle is left to the town planner to provide, if possible, at least a few through-going transverse arteries at the least expense. Again Detroit furnishes some glaring examples; for instance, the inadequate connection between Woodward and Jefferson Avenues inside of the Seven Mile Road.

Where a suburban section is located upon rolling territory with a number of owners, then the only rational, practical, economic, and beautiful solution of such a problem can be had upon a comprehensive, co-operative basis; by which the area is platted, regardless of existing property lines, and each owner is reallocated the same percentage of his original ground holdings in the same locality, minus the percentage of contribution to the common street system. A procedure of this sort is bound to be slow and require patience to get all parties to agree. However, it will be worth the effort, since not only a more beautiful subdivision will result, but also a great saving can be made in street construction and grading, besides allowing better street grades. I recently had just such a problem involving twenty-five different owners of about three hundred acres.

Also in localities where the residential sections do not offer any irregularities of topography or other natural features, or where these sections are not bisected by frequent radial rural highways that will relieve the monotony of the street plan, it would be desirable to follow this plan of co-operative comprehensive planning in order to get away from the bone-dry monotony of the rectangular street plan that affords no features of interest, no interesting perspectives peculiar to the curved or broken street, but presents uniform, endless vistas of straight streets with houses ultimately more or less alike, and as inspiring as a string of freight-cars. This senseless scheme of things is happily being supplanted by the more interesting and beautiful



modern plan of curved streets and broken vistas. However, this has its limitations when applied to small plots of ground within rectangular boundary-lines, and at best is only patchwork instead of evolving out of a general scheme. This is not to be understood to mean, though, that the straight street has no place in the modern subdivision or city plan. On the contrary, it has as much of a place as the curved street, and in many instances is far more practical, desirable, and in some instances more beautiful. The point is that there should be variety to break the monotony of a rectangular street system, and to adapt the street plan to the contours of the land.

There is still time and opportunity for city plan commissions to correct at least the most glaring defects in already platted suburban districts that have as yet not been built upon, by replatting such territory upon more scientific and artistic principles, and comprehensive lines, and upon a co-operative basis by which the replatted ground will be reallocated according to the original holdings and in approximately the same location. Of course this would in some cases be a considerable undertaking; however, considering the future welfare of the community, it would be well worth the trouble, and the property-holders would then at least possess something worth while to show for the inflated purchase price of their lots. So wake up, American communities, and salvage while you may.

The question of public buildings is also a very important consideration in every community, and, where possible, federal, county, and municipal buildings, such as post-office, court-house, city hall, auditorium, library, art and industrial museums, etc., should be brought into a group plan. Some engineers oppose this idea as being expensive, and because adequate space for future necessary expansion is often difficult to provide. However, I do not agree with this view, for if the original space does not allow of future expansion, then near-by property can be acquired, as was done with the office-building of the city of New York adjacent to the City Hall. Furthermore, as a city gradually covers a vast territory, there should be municipal borough centres to relieve the central office and for the convenience of the public.

Moreover, public buildings should not, as a rule, be located in the heart of a business district, because they more or less interfere with the expansion of business, either bringing it to a halt at such buildings or seriously interrupting it, thereby reducing adjacent property values, as well as those that lie beyond; besides, there is rarely sufficient available space in a business district for such buildings, and the ground is too expensive. Furthermore, there is no valid reason apparent why public business should not be concentrated as well as private business; and, lastly, public buildings should be a matter of pride to a community, and therefore be of dignified appearance; however, no matter how good the design, if the building has not a fine setting, much of its impressiveness is lost.

Therefore, since a fine setting cannot be obtained in an ordinary business district, why not combine public buildings, where possible, into a group plan, just offside the business district, where quite often a district can be found that has been scrapped in the forward march of events and has become cheap and dilapidated, in some cases having turned into a slum district. By doing this, more land can be acquired for less money, the buildings can receive an effective setting, and, because it is a real eyeful instead of scattered bits here and there, an impressive feature of beauty and local character is created in which community pride can be centred. Cleveland is here cited as an example where a

city took over just such a dilapidated district for its group plan, of which feature Clevelanders are very proud. However, this is not to be understood as championing any extravagance in public buildings. On the contrary, public buildings, like any other, should first of all fulfil their practical functions and be compactly and economically planned, but that is no reason why they should not at the same time be good to look upon and have a dignified setting, especially if this can be had by using good judgment in the selection of the site and great care in the design. The point is that there should be a sane nicety of balance of all questions that enter into all community undertakings.

At this point it seems in place to discuss the status of "beauty" in town planning.

If a community is to be developed into a homogeneous, well-rounded whole, that will conform to the diversified interests, needs, and preferences of its inhabitants, and allow them the enjoyment of all the worth-while things of life, besides the purely essential, then the maxim of "harmony of looks," or the "city beautiful," must be admitted to the partnership of essential maxims that should govern rational town planning, and a clear and unprejudiced opinion upon this should be had.

The old "city beautiful" idea as such, without primary consideration of the practical questions involved in a comprehensive city plan, is to-day but shifting sand to build upon, because of the largeness of the programme of essentials and the limitation of available funds. On the other hand, the predominance of the engineer during and after the war, and the wonderful feats of his profession, together with the high cost of improvements and the intense commercial spirit of these days, have brought about a tendency toward disregarding the æsthetic and beautiful, and to go to the other extreme of the purely "city beautiful" idea. Both of these extremes are wrong, as all extremes are, and it is only by keeping to the middle of the road between them that a thoroughly harmonious, all-round development of a community can be expected, and this can be only accomplished by co-ordinating the work of engineers, architects, and landscape architects, and by giving all phases of the plan their proper sphere of influence. Beauty is recognized to be a necessary part of the whole and in its place as much in order as any other part, especially if it can be had merely for the price of a more careful study of a project and by the application of higher standards of criticism and professional ability. These will in many cases increase values all out of proportion to the money expended. In all events, it is certain that the rational æsthetic can apply his art to any town-planning project or building, be it ever so commonplace, and by patient study give to it a simple beauty that will entail little or no additional expense and make all the difference in the world in its appearance. Where, however, there is no regard for beauty in a town plan, something very much worth while will be lacking in community life, and a lopsided development is bound to result. On the other hand, a harmonious, orderly plan will be secured from a proper consideration of this factor, since beauty, in a sense, is the product of "harmony and order."

In the past many town planners have been very reluctant to even mention the word beauty in connection with town planning because of the sins that have been committed in its name, and for the reason that this word has as yet no status before our courts, and, furthermore, because of a general lack of conscious understanding by the general public of the meaning of art and its importance in life; for in our intensely practical and commercial age art is looked upon by many as a thing apart from, instead of a



necessary part of, our daily life. But those who hold this view should remember that every age and civilization, and all races from the North to the South Poles, have striven to express their need and sense for the beautiful in some form or other, and that among the most valued and cherished heritages that have come down to us from these bygone ages are these works of beauty by man called art, as is attested by the fury and grief of the French and Belgians at the damage done during the war to their architectural monuments, to their domestic architecture, and to their fine old avenues of trees, etc. So why should not we strive to hand down to posterity as a mark and degree of our civilization lasting monuments of beauty besides our wonderful contributions to invention and science, which, moreover, are subject to change from year to year, whereas beauty remains constant through ages? In former ages it was the privilege of the church, and of potentates, to hand down this heritage, but in our democracy this is the privilege of all the people, since they are also the government; so it is up to them to make this contribution individually and collectively toward our present-day civilization, and to interest themselves in and further the finer and less obvious things of life.

We strive to surround ourselves in our daily life with good taste and express it in our homes, our household furnishings, our motor-cars, etc., so why be indifferent to the appearance of things that are common property and that we look upon day after day, such as our street pictures—our public and private buildings of all kinds, the railroad and highway approaches to our cities, our parks, etc.? Surely it is a greater satisfaction to look upon a beautiful street picture such as High Street, Oxford, England, or upon a harmonious building or bridges, or upon a beautifully laid-out park, than upon a commonplace or ugly one. Therefore, if, for example, an individual wishes to erect a building, why not make it a contribution toward the city beautiful and have a design of simple beauty that will fit the purpose and into its surroundings, and be a monument to the owner besides producing dividends?

Use a few examples in New York City, for the sake of illustration, the lessons of which, in spite of their typical New York magnificence, will hold good anywhere. The Woolworth Building, for instance, must be looked upon not only as an elaborate monument to an individual and an expensive advertisement of this name, but as a dominating landmark of great beauty and character that lends distinctiveness not only to the immediate street pictures but to the entire panorama of Manhattan Island, and consequently must be considered a distinct asset to New York.

Madison Square, on the other hand, which must be judged as a whole, promised at one time to become one of the most beautiful and picturesque open spaces in the world. Before the old Fifth Avenue Hotel was torn down there stood the Flatiron Building, a splendid solution of the problem, the Metropolitan Life Tower, the Parkhurst Church, the small Court Building, and the Madison Square Garden, besides a few other less conspicuous buildings. Then came the new buildings along the north and west sides of the square, which, for the most part, are lacking in refinement and good taste, not because of lack of money expended upon them, but because of lack of ability and gray matter put into the design. As it is, the square, still boasting a few distinctive features, has sadly fallen behind in the charm that it promised in its earlier structures.

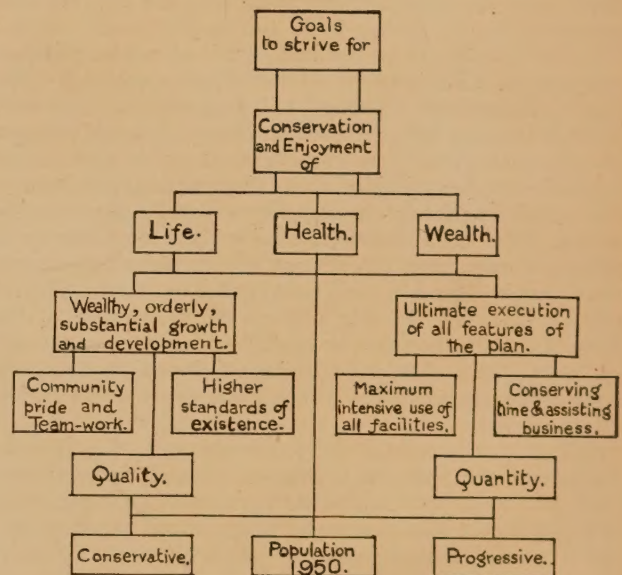
Buildings in such important locations should, therefore, have come under the jurisdiction of the New York Art Commission, and the lesson to be derived from this is that every community should have an art commission to co-operate with its city plan commission, whereby many an individual eyesore can be avoided, for be it remembered that no matter how well a town plan has been conceived, if the individual structures that line a street or square are without merit, or are not designed in harmony with each other, the ensemble will suffer. Wonders can be accomplished where there is a will and co-operation.

With such lessons to look back upon, it should not be difficult to convince the public of the necessity for a comprehensive plan.

#### GOALS

The goals of a community as set forth in this chart should be to provide healthy, substantial growth, and at the same time the means for maximum conservation and enjoyment of life, health, and wealth of its inhabitants, and to hand down to posterity this heritage in a well-worked-out

CHART VI.



plan and principles for community development, that these goals may be perpetuated and afford the greatest opportunities for constructive citizenship. This will put an end to makeshift, haphazard, uncorrelated development of the community by substituting orderly, economic, permanent development and growth, that will allow a maximum intensive use of all of the facilities of the community, and reserve from private ownership for public use such areas that will contribute toward the main goal and allow for the greatest possible expression of community spirit and pride. Mere increase in area and size of population, in other words, quantity without a corresponding quality of development, is a mighty poor, short-sighted goal for a community to strive for, and has a parallel in the man who amasses a great fortune but misses many of the finer, worth-while things in life.